

Alexandru Berzovan

AT THE BORDERS OF THE GREAT STEPPE



Late Iron Age Hillforts between the Eastern
Carpathians and Prut (5th–3rd centuries BC)



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A fortress seated on top of a hill cannot remain hidden.

(Gospel of Matthew, 5:14)

■ FOREWORD

I agreed to make the foreword of this volume because it is, on the one hand, the result of an interesting project by the author, whose scientific mentor I was, and, secondly, because I consider it a valuable work and some of the topics approached concerned me along the time. I will make a brief presentation of the volume, with some general observations and appreciations.

The table of contents is elaborated and balanced, with a logical and coherent structure, meant to help the author in his analyzes and demonstrations.

In the *Introduction* chapter, the author presented the methods and means used to carry out the research, noting that he had access to the results of LiDAR scans, performed by the Prut – Bârlad Basin Administration, which allowed him to locate and map with the utmost precision most of the hillforts.

The chapter *History of Archaeological Researches* is divided into several periods, in our opinion also logical, presenting both the progress of archaeological research and the failures of each stage, notable being the books remaining as manuscript and, in some cases, even the loss of some fundamental works, especially of Adrian C. Florescu. In the last part of the chapter, the author briefly presents his own field research, highlighting both the outcomes, as well as the difficulties he encountered.

The chapter *Archaeological Repertoire* is divided in two parts – the repertoire of hillforts and, respectively, an *Addenda et corrigenda*. It is a special achievement of this work, not only in size, but also as added value to scientific research. Benefiting from the support of various collaborators from county museums, the author checked on the ground all the 37 hillforts presented, many of them little known before. Each site is described with a detailed presentation, a series of characteristics being approached (geographical framework, research history, main discoveries, etc.). The text is accompanied by a rich illustration presenting the hillforts: photos, maps and topographic data taken with GPS. The plans, obtained after analyzing the LiDAR scans, are useful, so that these sites can now be easily identified on the ground. The *Addenda et corrigenda* part is also useful, because here the author discusses in a critical manner the information from the previous archaeological literature.

In the chapter *The Hillforts in the East-Carpathian Landscape* are presented several issues related to the hillforts described before, such as spatial distribution, their relationship with different forms of relief, the area of visibility between hillforts. The author noticed, based on the data available, that most sites are located to the east of Siret River. Analyzing the entire group of fortresses in the Carpathian-Dniester area, Dr. Alexandru Berzovan observed that if east of the Prut River most of the fortresses are located near rivers, in the western parts these occupy the interfluvial areas. Considering the spread of the hillforts according to relief, the author distinguishes three basic types: a) fortresses that enclose an area from a plateau, b) hilltop forts located on top of prominent heights and c) hill-slope forts, located in low areas. Regarding the barrows located inside the precincts of some of the sites (eg, Moșna, Cotnari), in the absence of archaeological research, the author considers that no further observations can be made.

The chapter *Understanding the hillforts. Morphology and defensive systems* is a very important one, since the author approached the shape, dimensions and entrances into the hillforts, an important discussion being dedicated to the analysis of the hillforts defensive system. For the researched area, the author distinguishes two types of defensive systems: the dump rampart and the so-called complex palisade or timber-box rampart. If the existence of the first type cannot be doubted, in the case of the second, due

to insufficient archaeological documentation, certain question marks persist regarding the two sites where it is reported (Arsura and Brăhăsești). The situation from the hillfort of Cotnari-Cătălina seems to be completely different, and the author, based on the little documentation kept in the archives of the Institute of Archeology from Iași, tries to clarify the fortification system. The defensive systems of the hillforts are discussed in terms of military effectiveness and the effort required building them.

In the chapter *Living in the enclosures. Structures inside the hillforts* is discussed the problem of the structures discovered inside the fortresses, the author considering that these fortresses cannot be considered, justly, proto-urban settlements. The dwellings are analyzed both on the basis of published data and the excavations coordinated by the author. Surprising is the absence of certainly documented cult structures inside the fortresses (excepting a ritual pit from Stâncești), but the situation may be explained by the insufficient researches.

In chapter *Occupations and Crafts*, the author briefly analyzes, based on unequal data from the published literature, both the issue of food-producing occupations (agriculture, animal husbandry, hunting), as well as pottery, weaving and jewelry making.

In the chapter dedicated to *Exchanges*, the author discusses this aspect, but, based on insufficient material, the he rightly states that not much can be said about the trading relations that the inhabitants of these hillforts had with the Greek, Scythian and Celtic world.

In the chapter *Treasures and hoards in the hillforts* the author aims to discuss the problem of hoards, not too numerous, discovered inside fortresses, among which we note the observations on the functionality of some objects from the Stâncești hoard and the very special situation of the Bunești hillfort, in which several hoards and deposits were found.

In *Conclusions*, the author considers that the cultural “uniformity” that happened in the entire space between the Carpathians, the Balkans and the Black Sea favored the spread of southern cultural modes and cultural patterns, the Greek colonization also having an impact on multiple levels on the local North Thracian population. Also, the existence of a favorable climate, along with cultural contact, are just a few of the factors that determined the appearance and development, between the 5th–3rd centuries BC, of such a large number of hillforts in the East Carpathian area. I would add to these influences, the danger of the “Scythian” populations, which came from the east.

Trying to identify in the ancient sources the builders of these fortresses, researcher Alexandru Berzovan hypothetically identifies them with the so-called “Istrians” whose un-named king opposed the advance of the Scythians commanded by Atheas. We consider that this proposal should only be seen as a simple suggestion, as the evidence is ambiguous and inconclusive. Finally, the causes that led to the abandonment of these fortifications at the end of the 3rd century BC are discussed, when the Bastarnae population entered the central-northern area of Moldavia, along with their cultural-archaeological expression, the Poienеști – Lucașeuca culture.

The volume is highlighted through original contributions, introducing, at the same time, in the scientific circuit valuable original material, presented in a modern methodology. The author’s observations, analyzes and conclusions are well argued and balanced, expressed in an academic language, based on a good documentation and knowledge of the cultural-historical realities in the area.

The author used a rich bibliography, Romanian and foreign, often making comparisons with documented situations from other geographical and cultural areas, more or less close.

The illustration in the book is of good quality, noteworthy being both maps and drawings made for each fortress, satellite and aerial images, as well as drawings of some artifacts, well arranged in plates and easy to follow.

All these qualities prove the long work and rigorousness of Mr. Alexandru Berzovan, so that, undoubtedly, the volume is an important contribution in the research of the phenomenon of the East Carpathian hillforts from the 5th–3rd centuries BC, and some chapters will become a fundamental reference for the topic approached.

Valeriu Sirbu

■ INTRODUCTION

Eastwards, beyond the foggy, wooded ridges of the Eastern Carpathians, lies a land dominated by rolling hills and knolls, covered in earlier periods by extensive forests and patches of plain. From northwest to southeast flow several large rivers, known since ancient times: Siret, Prut, Dniester, with their numerous tributaries. Corresponding roughly to the historical province of Moldova, this land is literally at the western edge of the great Eurasian Steppe...

Between the 5th and 3rd centuries BC, at the beginning of the Late Iron Age, on this territory were built an impressive number of hillforts, witnessing large-scale, unprecedented constructive efforts. According to some estimates, around 130 such forts are known between the Carpathians and the Dniester. Some of them are modest, barely visible and almost forgotten, but others even today continue to rise majestically in the landscape, their massive ramparts and ditches impressing the viewer. As expected, these monuments did not leave archaeologists indifferent, who over time sought to unravel their story, with various degrees of success. Nowadays, if the situation of the objectives located between the Prut and the Dniester is better known, given the activity of the archaeological school from Chisinău (Republic of Moldova), the monuments located west of the Prut, on Romanian territory, have remained somewhat less known, due to various objective and subjective reasons.

Through this volume we aim to cover this gap as much as possible, by providing an overview of the hillforts located between the Carpathians and the Prut. But our work will be more than a simple repertoire; as we try to understand these hillforts, we will also seek to answer a series of difficult questions and problems related to the cultural and historical developments that happened in this region during this early period of the Late Iron Age.

Our book contains nine distinct chapters. In the *first chapter*, dedicated to the introductory aspects, we discuss the means and methodology that we used in our research, while reviewing the geographical conditions of the studied area. The history of research is discussed in the *second chapter*; there, we made a detailed analysis of the main historiographical contributions to the issue as well as the evolution of the scientific knowledge. An important role in the economics of the study is played by the repertoire of hillforts, to which we have dedicated *the third chapter*. We tried to use all available categories of data to reconstruct as accurately as possible the plans of the discussed hillforts.

Chapter four is dedicated to the analysis of the areal distribution of the objectives. The spatial distribution, positioning in relation to landforms, as well as the area of visibility are discussed. In *chapter five* we present the hillforts from a morphological point of view: shape, size, defensive systems. An important part of the chapter is dedicated to the discussion on defensive systems and their typology. We sought to approach this subject from a broader perspective, in an attempt to understand the technologies as well as the concepts involved in building such kind of monuments.

In *chapter six*, we discussed the issue of structures discovered inside the hillforts. We analyzed problems such as spatial organization, the typology of dwellings, pits as well as the problem of a possible cult structure found in the Stănțești hillfort. The *seventh chapter* is dedicated to occupations and crafts. We addressed food-producing occupations (agriculture, hunting, animal husbandry) while also discussing production of ceramic vessels and the material evidence for various other crafts such as spinning and weaving, metallurgy, jewelry production. *Chapter eight* is dedicated to

exchanges. Within the limits of the available material, we sought to discuss the issue of trade relations developed by the hillfort builders with the Greek world, but also with other neighboring populations and cultural areas, while the *last chapter* presents some of the hoards and deposits found in the hillforts of Stâncești and Bunești.

The volume ends with the *Conclusions*. Here we try to give answer to three very complex problems: what were the causes that led to the construction of so many hillforts in the Carpatho-Dniestrian area, what were the reasons that led to their destruction and abandonment in the last quarter of the 3rd century BC, respectively the name and history of the population who built them.

We sought to write the book in an accessible language, as much as possible without technical excesses, with the idea of making it accessible to a wider audience. We would like the ideas and hypotheses we expressed to provoke constructive discussions and polemics, to ultimately instigate and inspire further investigation of these spectacular monuments. As the great poet Kahlil Gibran once said, “*And all that we have gathered and shall gather shall be but seeds for fields yet unploughed*”.

* * *

At the end of this introduction, I would like to thank all those who, in one way or another, contributed to this work. First and foremost, I thank the mentor of my post-doctoral project, Dr. Valeriu Sîrbu, for the guidance he gave me throughout the entire process of writing this book. I also thank Dr. Alexander Rubel, director of the Institute of Archeology in Iasi, for all the support and encouragement received during this work. My gratitude goes to dr. Aurel Melniciuc (Botoșani County Museum), dr. Mircea Oancă and dr. Mircea Mamalaucă (Vasile Pârvan County Museum from Bârlad), Dr. Constantin Aparaschivei and dr. Bogdan-Petru Niculică (Bucovina Muzeal Complex of Suceava), dr. Valentin – Romeo Muscă, dr. Aurora-Emilia Apostu and dr. Aurel Nicodei (Vrancea County Museum), all of whom greatly helped me during field surveys. I also thank dr. Lăcrămioara Stratulat and dr. Senica Țurcanu (National Muzeal Complex Moldova Iași) for granting me permission to study the archaeological materials from the Cotnari-*Cătălina* hillfort and for all their support. I also thank to my former PhD. Professor, dr. Nicolae Ursulescu, but also late to dr. Vasile Chirica, who encouraged me since 2016 to approach the topic of the early Late Iron Age hillforts.

Together with dr. Dumitru Boghian (Ștefan cel Mare University of Suceava) and dr. Sergiu Enea (Ion Neculce Theoretical High School from Târgul Frumos) I made my first steps in the archaeological research of the East Carpathian hillforts of the 5th–3rd centuries BC. I thank them for all the selfless support they have given me since 2016.

To dr. Adela Kovács (Botoșani County Museum) and dr. Mihai Niculiță (Alexandru Ioan Cuza University of Iași) I offer my special gratitude, as they took their time to read this work in its early stages, offering valuable suggestions and help. Adela had, in many ways, an indispensable contribution to the successful completion of this book. Her husband, Alexandru Kovács (Bucovina Muzeal Complex of Suceava) had greatly helped with spell-checking the entire text. Any mistakes or errors remaining in the text are our own.

Field surveys would have been much more difficult without the support of my collaborator and friend, George Bosie. Together we made numerous archeological “expeditions” on the territory of Iași, Vaslui and Neamț counties. My good friend Valentin Roman understood that the only way to unravel the ancient history of these lands is through archaeology, and I thank him and his sponsors for all the support offered for my excavations in Dobrovăț.

My thanks also go to the following colleagues, collaborators, friends who helped me in various ways throughout the entire process of writing this book: Costică Asăvoaie, Cătălin Borangic, Sever Boțan, Lavinia Grumeza, Ștefan Honcu, Ion Ioniță, Cosmin Niță, Gheorghe and Magda Lazarovici, Alin Mișu-Pintilie, Bogdan Minea, Radu Oltean, Dan and Magdalena Ștefan, Silvia Teodor, Denis Topal.

Finally, my thoughts go towards my family, especially my wife Anca and my son Răzvan Nicolae. Anca had much patience, for many days we had spent apart, with me either searching and documenting hillforts in the woods of the Moldavian Plateau, or at home at my desk, sitting hour after hour in front of the computer and writing. I dedicate this work to them.

■ CHAPTER I. INTRODUCTORY ASPECTS

I.1. Means and methods

I.1.1. General considerations

More and more often, the description of means and methods in a large part of archaeology volumes published in recent years involves complicated sophisticated excursions, built upon extensive bibliographies of theoretical archaeology, ingrained in various schools of thought. As we all know, we are in a period where the discipline of archaeology is marked by a real avalanche of new technologies and methodologies, coming especially from the sphere of natural sciences. Unquestionably, these have allowed a better understanding of human communities' evolution, dynamics and their relations with the natural environment, at levels of complexity that our scientific forerunners could not have achieved.

On the other hand, archaeology is in a visible tendency of slipping further and further away from the sphere of the humanities, divided into a whole series of technical sub-disciplines in which the much sought after methodological accuracy often ends up being placed above the yielded scientific results¹. Will the archaeology of the future be able to fully use the advantages of interdisciplinary research without losing the specific features of humanities? Any answer to this question is, of course, difficult to anticipate but it will no doubt have reverberations on the future and relevance of our profession. In any case, we are of the opinion that interdisciplinary research in archaeology is useful as far as it can offer value in understanding the past human behavior².

Taking into account the above mentioned, the discussion we will propose in the following will be limited to exposing some concrete aspects related to the mapping and identifying the archaeological objectives that we study, with a few necessary observations regarding the conceptual framework, without going into in-depth theoretical discussions which had already been treated in various dedicated works published in the last decades³.

I.1.2. Means and methods used for identifying and mapping the forts

The identification of the hillforts discussed in this volume had known three distinct stages: a first stage dedicated to bibliographic documentation and analysis of cartographic material; a second stage involving field trips, in which the documentation was confronted with the data visible on the terrain and finally, a third stage of processing in which the information collected from the surveys and those from the bibliography were corroborated in order to outline an image as accurate as possible.

¹ Zugravu 2012, p. 61.

² Anghelincu 2014, p. 334–335.

³ We shall mention only the evolutions in Romanian historiography. For digital and spatial archaeology (including GIS analysis), we mention the excellent book written by M. Ștefan, D. Ștefan and V. Căvruc (Ștefan *et alii* 2012) or the manual published by D. Micle, A. Cîntar and L. Măruia (Micle *et alii* 2011); for East-Carpathian region, with an emphasis on Eneolithic, see Asăndulesei 2015. All these works provide ample description of various methods, with plenty of examples (especially in landscape archaeology).



Figure 1. The hillfort of Dochia-Cetățuia Sărățica (Neamț County) on the first Austrian topographical map depicting the western districts of Moldavia (1788–1790), after www.mapire.eu.

The *first stage* began by studying the existing archaeological repertoires, but also articles, studies and repertoires targeting our area of interest, most of them being digitized for better operability. We also took into account the information provided by late 19th – early 20th century sources such as the *Odobescu Questionnaire*⁴ or the *Great Geographical Dictionary* and others, as they provide us with valuable data regarding the condition of monuments before modern interventions affected them. An important role in our enterprise was played by the archival material found in the collections of the Institute of Archeology from Iași and other institutions in the area (especially Iași, Botoșani, Bârlad county museums).



Figure 2. The hillfort of Stâncești (Mihai Eminescu commune, Botoșani County) on the Map of Moldova (1892–1898). One can see marked the ditch of fort no. 1 and also the relevant toponym “Dealul Șanțului Stâncești” [Stâncești Ditch Hill].

Regarding the cartographic material, we used in principle three supports: the 1:25 000 Topographical Map of Romania, second edition, made between 1974–1978⁵; the so-called Firing Plans [Planurile Directoare de Tragere] at 1:20 000, made between 1880–1940⁶; the map of Moldova made between 1892–1898⁷, at 1:50 000, a most important source for identifying older placenames.

⁴ Unfortunately, due to the Covid-19 sanitary crisis existing at the time of writing this volume, we could not reach the original manuscripts of the *Odobescu Questionnaire*, in the collections of the Library of the Romanian Academy, having to limit ourselves to taking data from other authors who consulted the fund.

⁵ <https://www.geomil.ro/Produse/HartiTopografice25ST> (accessed on 14.03.2021).

⁶ Accessible on <http://geo-spatial.org/harti/#/viewer/openlayers/10> (accessed on 14.03.2021).

⁷ Can be consulted on the internet site www.mapire.eu (accessed on 14.03.2021).

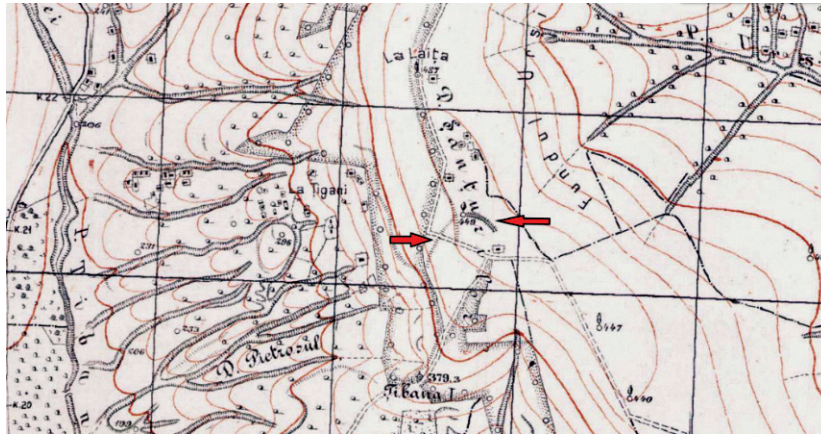


Figure 3. The hillfort of Poiana Mănăstirii – Între Șanțuri (Țibana commune, Iași County) on the Firing Plans. One can see marked the ditch and rampart of the fort as well as the relevant toponym “Dealul Șanțurilor” [The Hill of the Ditches].

Another category of cartographic resources we relied on are satellite imagery provided freely by Google Earth and Bing Maps. The usefulness of aerial imagery in identifying archaeological sites such as hillforts is well known in specialized literature⁸. The usage of old satellite photos, made during the Cold War by the US Army and declassified after 1990s also proved useful⁹.



Figure 4. The hillfort of Cotu-Copălău (Botoșani County). Satellite photography made in 1978 (after <https://earthexplorer.usgs.gov>). White arrows mark the contour of the hillforts defenses.

However, the most valuable and useful tool that we used extensively throughout this work was the bare-earth DEM¹⁰ interpolated at 0.5 m resolution, based upon LiDAR scans, made available to the Institute of Archeology in Iași by the *Prut-Bârlad Water Basin Administration* as a result of a cooperation protocol concluded in 2018. The DEM cover an area of more than 20 000 square kilometers between Siret and Prut river, where most of the hillforts discussed in this book are located.

The second stage, *the field surveys*, consisted in the systematic verification of the objectives – both those known in the literature and those less known, that we found during the analysis of the

⁸ For example, Giardino, Haley 2006, p. 47–78; Gojda 2006, p. 5–19; Dorogostaisky 2008–2009.

⁹ The CORONA (before 1970) and HEXAGON (after 1970) satellite imagery (<https://www.usgs.gov/centers/eros/science/usgs-eros-archive-declassified-data-declassified-satellite-imagery-1>; <https://www.usgs.gov/centers/eros/science/usgs-eros-archive-declassified-data-declassified-satellite-imagery-2>; <https://www.usgs.gov/centers/eros/science/usgs-eros-archive-declassified-data-declassified-satellite-imagery-3>) is available on USGS Earth Explorer (for the exact methods of accessing see Condurățeanu 2014, p. 793–820).

¹⁰ DEM is the standard abbreviation for Digital Elevation Model.

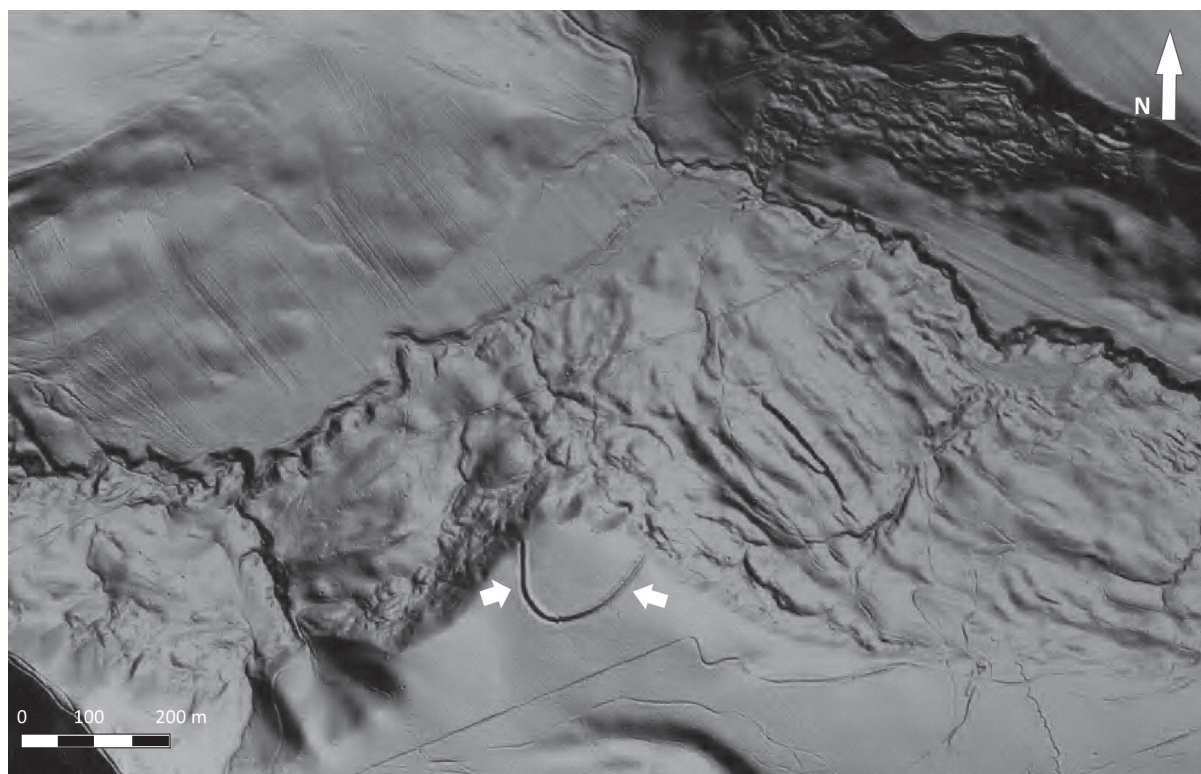


Figure 5. The hillfort of Văculești-Dealul Podiș (Botoșani County) on LiDAR scans.

bare-earth DEM. The primary data was downloaded into a GPS device, that was used for guiding. The defensive systems (ditch, rampart) and other aspects were documented photographically, and relevant archaeological material was gathered from the surface.

Field researches involved in few cases also non-invasive *magnetometric surveys*. This was possible through various collaborations over time. Thus, in 2017, a team from Friedrich Alexander University of Erlangen (Germany) composed of dr. Carsten Mischka and Imren Tasimova scanned 6 ha in the hillfort of Poiana Mănăstirii – *Între Șanțuri* (Iași County), offering a first glimpse of what lies beneath the surface of this important site¹¹. In 2020, dr. Dan Ștefan (Eastern Carpathians Museum, Sfântu – Gheorghe) also scanned a consistent tract in Fort 1 from the Stâncești hillfort (Botoșani County) with interesting and promising results. Aerial photography of some sites were also taken, with the help of a Mavic Air 2 type drone piloted by us.

Finally, *in the third stage*, all the existing information was corroborated. Interpretation maps were created for each individual site, using as support the LiDAR scans, aerial and satellite photos, as well as the topographical maps. Most were made through a collaboration with our colleague dr. Miha Pintilie Alin from the Arheoinvest Platform (Alexandru Ioan Cuza University of Iași). Also, for some of the objectives, long-range cumulated viewshed analysis were made.

Field surveying as a method might be considered at first sight unreliable, as conclusions regarding the chronology and framing of sites arise (mostly) from the archaeological material recovered from the surface, that obviously does not have any clear stratigraphic context. For these reasons, maybe also due to a lack of a solid tradition in *landscape archaeology* in the Romanian archaeology of the Late Iron Age¹², the field survey and the works based on its results are viewed with a certain degree of skepticism, often seen as something worthy of students or beginner archaeologists.

¹¹ Berzovan *et alii* 2017.

¹² In contrast, the Prehistoric or Roman period archaeologies in Romania have been generally been much more receptive to such approaches. For Late Iron Age archaeology, this state of affairs has only begun to change in the last decade, with the emergence of large-scale research projects emphasizing landscape study. We may mention here the studies of

A more in-depth discussion on this topic would be long and quite delicate. What is certain is that this state of affairs has led many sites to remain unpublished, not included in the scientific and legal circuit, and consequently vulnerable to metal detectorists and treasure hunters.

In defense of the field survey, we might make some further observations. The first one is that when making any repertoire of sites for an epoch and a region, it

is often impractical, if not impossible to execute test-trenches in each individual objective. Thus, one will have to deal with excavated sites, that obviously offer significant amount of data – and sites from which information comes solely from field surveys, that offer less data and less certitudes, but cannot be ignored and excluded if one wants to get an overall picture of the evolution and extension of a cultural phenomenon within a given area.

Furthermore, in our case, the probabilistic-statistical factor cannot be neglected: in a region with a high concentration of Late Iron Age hillforts confirmed by archaeological excavation (and with a scarcity of such monuments for other epochs), a fortification from which is recovered material specific to this timeframe has a majority of chances to actually belong to it. The introduction of these objectives in the literature – with all available data – even with uncertainties and question marks – is more than necessary, as it provides necessary information and a starting base for future invasive research¹³.

A more specific problem to field surveying hillforts is establishing the outline and shape of the defensive works. In most cases this is a rather easy enterprise as the fortification elements (ramparts, ditches) are still visible on ground, often quite impressive in size. In some cases, one or two field surveys combined with the DEM and other means might be enough to reliably reconstruct a plan. But there are also situations which are much more delicate.

Natural hazards such as landslides have affected many sites, altering their original shape, sometimes leading to the destruction of much of their defensive systems, from which only modest and scattered ruins remain. While some of these slides happened in recent times, others seem to have taken place in the past, anytime in the last 2300–2400 years. Unfortunately, the Moldavian Plateau, the area where most of the sites are located – is especially prone to this kind of hazards due to its specific geologic structure¹⁴.

Equally, numerous anthropogenic interventions such as intensive agriculture, forest plantations, vineyards, constructions, rock-quarries and so forth have caused and are continuing to cause a constant reconfiguration of the visible archaeological landscape, damaging and destroying the archaeological sites. Under these conditions, in order to reconstruct the plan of some hillforts or to confirm whether a site is a hillfort, a different kind of structure or even a *natural accident*, it is



Figure 6. Aerial photograph of the Crivești-Cetate hillfort (Strunga commune, Iași County), from North-West direction.

S. Berecki dedicated to Late Iron Age settlement patterns and landscape in Transylvania (for ex. Berecki 2015). Another good example is the Hilands project, dedicated to the research of the mountainous area of the Curvature Carpathians, which involved numerous specialists from several Romanian research and museum institutions. Using a set of modern and elaborate methodologies (that ranged from field surveys to LiDAR scans) the project managed to produce remarkable results (see <https://hilands.net4u.ro/>, accessed on 27.12.2021).

¹³ For three hillforts surveyed by us and our predecessor, subsequent diggings fully confirmed their dating in the early period of the Late Iron Age.

¹⁴ Niculiță 2020.

necessary to use a wide range of resources, and even so, oftentimes question marks will remain that can be clarified only through *invasive archaeological investigations*.

In general, we can say that surveying and mapping the forts is not as easy as it seems. It is, in many ways, a long and continuous process¹⁵. Undoubtedly, future researches will bring corrections and addenda to the preliminary data that we offer in this book.

I.1.3. The methodology for the description of hillforts in the repertoire

Regarding the names of the objectives, we preferred as much as possible to use the toponyms that are marked in the consulted cartographic materials. The reader who will go through our repertoire will observe that in a few cases some hillforts appear rounded to two distinct localities (sometimes from different counties), like for example Oțeleni / Bâra-Cetate (Iași County / Neamț County) and a few others like this. This is due to the fact that cadastral boundaries often pass through the interior of the enclosures and we deemed necessary that this situation be reflected in our nomenclature, in order to avoid any possible confusions, that sometimes are present in the older specialized literature.

In order to describe the fortifications as completely as possible, we used a standardized format for each case. We will present and discuss all individual fields in the following table:

Indicative	Field name	Explanation
A.	Toponym	This field contains the name of the locality and the toponym. If there are alternative names, they are mentioned in turn, in order to avoid any potential confusion.
B.	History of research	The history of researches is briefly mentioned, according to the formula: “research type, author, year”.
C.1.	Geographical positioning	Point C discusses the geographical positioning. The general geographical location is presented, followed by other aspects such as the major and minor landform on which the objective is located.
C.1.a.	The current condition of the terrain	The current state of the land at the date of the last check is mentioned. This is important both in terms of protecting the area and in the context of future research.
C.1.b.	The state of conservation of the objective	The state of conservation of the objective at the date of the last verification is mentioned, but also the possible risks and problems.
C.2.	Hydrographic landmark	The closest watercourse or spring to what is considered to be the limit of the discussed objective is mentioned.
C.3.	Coordinates	The coordinates of the hillfort (the location given in its center) are mentioned, in GPS degrees.
C.4.	Absolute height	The absolute altitude, in meters, of the objective. Since most of the hillforts are located on uneven terrain, the value that is given within a range limit.
C.5.	Relative height	Relative altitude, in meters, in relation to the surrounding area (valleys, etc.). The indicator is very relevant for objectives located at prominent heights. Since most of the hillforts are located on uneven terrain, the value is often given within a range limit.
D.1.	Type	The hillfort is presented from a typological point of view, if there is more than one enclosure, etc.
D.2	Dating	The general chronology of the site

¹⁵ For these reasons, the reader of this volume, will, in a few particular cases, find certain differences between the hillfort plans we proposed in certain earlier studies or those proposed in previously published studies and those presented here. We offered for each situation the necessary explanations.

Indicative	Field name	Explanation
D.2.a	Traces of habitations from other timeframes than our period of interest	All settlement traces from other historical or prehistoric periods, with the related chronology / cultural classification are mentioned in this field.
D.3.	Type of fortification	The type of fortification is mentioned (eg. ditch and rampart, stone wall, etc).
D.4.	Total surface	The total surface of the hillfort is mentioned (in hectares)
D.5.	Description of the archaeological situation	A detailed history of the research and description of the archaeological situation is presented
D.6.	Observations	This field is intended for additional observations (for ex. presence of adjacent tumular necropolis, etc)
E.	Bibliography	The main bibliographic titles that deal with or aim at the discussed objective are indicated. The list is not and is not intended to be exhaustive: only the relevant entries (primary sources, dedicated articles, entries in encyclopedias etc.) are mentioned.
-	Maps, on-site ground and aerial photos, interpretations and general archaeological plan	This field is dedicated to maps (Google Earth, ortophotos, LiDAR scan, geomagnetic scans and interpreted plans. It also contains general archaeological plans of the objective (if available).

Table 1. Standardized fields for describing the hillforts in the archaeological repertoire.

1.1.4. Remarks regarding the terminology and historical interpretations

Most times the toponym used to designate the discussed objectives in Romanian language is “cetate” or “cetățuie” (from Latin “*civitas*”)¹⁶ more rarely “horodiște” or “grădiște” (from Slavonic “*gorod*”, in the areas populated in the past or in present days by Ukrainians, Lipovans or other Slavic people). Romanian word “cetate” – also used in specialized literature – can be translated in English variously as “fort”, “fortress”, “castle”, “fortified city”, designating (generally) any *permanent* historical human settlement, construction set or area that is protected by fortifications¹⁷.

Regarding the name of the studied archeological objectives that we will use in this work, we preferred to call them generically “hillforts”, in consonance with specialized works from other countries¹⁸, especially Western European literature¹⁹, even if, geographically speaking, a few of our “hillforts” are in fact located in valleys. The term “hillfort” itself is not without its criticism, some of it justified, but so far no better replacement has been proposed²⁰.

A problem we encountered in the specialized literature is the designation of the chronological stage(s) for the 5th–3rd centuries BC period. When precisely does the Early Iron Age ends in the

¹⁶ <https://dexonline.ro/definitie/cetate> (accessed on 14.03.2021).

¹⁷ That is why in Romanian language paper we published we prefer to call them “cetate”, or “cetăți”.

¹⁸ <https://en.wikipedia.org/wiki/Hillfort> (accessed on 14.03.2021).

¹⁹ Shaw, Jameson 1999, p. 278.

²⁰ Shaw, Jameson 1999, p. 278. In the words of the reputed British archaeologist Alexander Hubert Arthur Hogg, “No archaeologist is satisfied with the term “hill-fort” ... if “fort” is understood in the modern sense this is misleading: the enclosures may have corresponded to anything from a cattle kraal to a small town, but were seldom exclusively military” (Hogg 1975, p. XV); see also the discussions in Driver 2018; Harding 2020, p. 125. Using the term “fortified settlement” instead of “hillfort” (as preferred by a number of authors) is also problematic. The differences in size and shape of these objectives, as well as in their enclosing systems, as seen in all areas of Ancient Europe where they are attested, suggest a high degree of functional variability, thus calling them globally with a specific functional – “fortified settlements” – cannot be but simplistic (Forenbaher, Sikanjic 2006, p. 467 with bibliography). In the words of I. Brown “It would be wrong to call them “settlements” per se – they were much more than that and were no doubt considered as “something special” by their creators” (Brown 2009, p. 3).

East-Carpathian Area of Romania and when does the Late Iron Age begins? Can we speak here of actual “Hallstatt” or even more “Latene” period? The problem is complex, as in specialized literature the East Carpathian findings from the 5th–3rd centuries BC are defined either as “Late Hallstatt”, “Hallstattian type”, “Hallstatt D”, “Early Latene”, “Latene I”, “Latene II” or even “Getic Latene”, other times ethnic or pseudo-ethnic determinants being used, such as “Geto-Dacian”, “Getae” or “Thraco-Getae”²¹.

A good part of this terminological chaos originates, in our opinion, in the constant conflict between the two opposite tendencies specific to modern and contemporary Romanian culture, that also reverberates at varying degrees in the archaeological discourse: synchronism and autochthonism. In our case, adepts of first generally tried to synchronize and analyze the finds within the established cultural and chronological frameworks used for Central Europe (often quite abruptly), while adepts of the second current resorted to a conservative, if not a very strict culture-historical approach, more or less based in forms of nationalistic perception²². Another root of this problem was the tendency to treat the entire northern Balkan area as a single unit, despite the fact that the cultural and historical evolutions in various regions were different. The problem is, of course, a quite delicate one, in itself a serious theme of reflection and an in-depth discussion would go well beyond the scope of this study.

As we do not wish to load our volume with historiographical (or ideological) disputes, we limit ourselves to making a few observations for our object of study. Thus, the East Carpathian region of Romania, our area of interest, is positioned geographically and culturally in an area of confluence, having received various influences from different directions during ancient times and prehistory. Moreover, the archaeological and historical evolution of the East Carpathian area in the period between the end of the 7th century BC until the Christian era is marked by a number of distinct stages (see table *below*) characterized in a few cases by *significant cultural discontinuities*.

a) The period between 7th–6th century BC marked by intrusions of populations incoming from the Eastern Steppes (“Scythians”, “Agatyrsoi”)²³, inhumation graves (often with weapons) and isolated finds of *akinakai* with analogies in the North-Pontic area, appearance of gray wheel-made pottery, settlements with materiality that bears a strong local Early Iron Age patina²⁴.

b) The period between (6)5th–3rd centuries BC, *our period of interest*, marked by the emergence of a significant number of hillforts, a significant increase in the density of settlements, apparition of flat and tumular necropolises (usually cremation), commercial connection with the Greek world through the Pontic colonies and a visible convergence at all levels with the cultural and social models of the Lower Danube and the Northern Thracian “Getae” world especially during the 4th–3rd centuries BC.

c) The period from the end of the 3rd century BC until around early 1st century BC is marked by a pregnant cultural discontinuity, as the bearers of the Poienești – Lucașeuca culture (generally identified with the historical Bastarnae) settle in the East-Carpathian area around 220 BC. Hillforts are abandoned or destroyed, most of them never to be resettled; settlement pattern and type changes as well as funerary costumes, and a new cultural and social paradigm is created, having obvious connections with the cultures of northern Europe (Jastorf) and those of Central – European Latene²⁵.

²¹ See for example: Florescu 2022 *passim*; Ursulescu 2017, p. 132–147; Teodor 1999, *passim*; RAJ Iași I 1984, RAJ Iași II 1985, RAJ Botoșani 2016 and many others. In our earlier works dedicated to the problem, in consonance with the dominant trend in Romanian historiography we also used the terms “Getae” or “Thraco-Getae”, but later we decided that switching to a neuter terminology is more adequate.

²² For the problem of culture-historical approach in Romanian archaeology, see Anghelinu 2014, *passim*.

²³ For West-Podolian type finds, Huși – Suruceni group and other finds from this period, see Ionomu 1996, p. 21–56; Ignat 2000, p. 331–344; Ignat 2004, p. 5–12; Ignat 2006; Berzovan 2016b, p. 139–162 with the bibliography; for the finds in Bârsești, see Teleagă 2020; Teleagă 2020a.

²⁴ For ex. Ionomu 1982, p. 127–192.

²⁵ For the problem of the Poienești – Lucașeuca culture, its origins and chronology, see Babeș 1993; more recently, Babeș, Iarmulski 2020; See also IstRom 2001, p. 522–526; IstRom 2010, p. 511–540.

Years (BC)	East Carpathian Area	North Pontic Steppes	Transylvania	Northern Thrace / Lower Danube Area	Central Europe (after Reinecke)
750	Early Iron Age Late Basarabi / Șoldănești culture vestiges	Early Scythian Period	Early Iron Age Late Basarabi culture	Early Iron Age Late Basarabi and Babadag Culture (in Dobrudja)	Hallstatt C
700	West-Podolian type burials and Huși – Suroceni Group burials; Bârsești group; settlements with Early Iron Age type materials.		Ciumbrud Group (“Agathyrsoi”)	Ferigile – Bârsești Group	Hallstatt D
650					
600					
550					
500	Period in which hill-forts are being built – cultural convergence with the Northern Thracian World	Classical Scythian Period	Local groups, convergence with Northern Thracian world	“Thraco-Getic” period, hillforts are being built, cultural convergence with the Thracian and Hellenistic World	Latene A
450					
400					
350					
300		Latene B (Celtic type-vestiges)	Latene B		
250		Latene C (Celtic type-vestiges)	Latene C		
200	Since around 220 BC, Poienеști – Lucașeuca culture (Jastorf and Latene-influences)	Early Sarmatian Culture. Late Scythian survivals on lower Dniestr, Dniepr and Crimeea	Dacian culture	Dacian culture	Latene D
150					
100					
0	Dacian culture	Middle Sarmatian Culture			

Table 2. Orientative chronology of the East – Carpathian Area and neighboring areas. Important note: there are small differences in proposed chronology from author to author; also, chronology periods are "rounded" to 50 years' period. The period discussed in this work is marked with *light gray*.

d) The period from the beginning / middle 1st century BC until 106 AD marked by the dissolution of Poienеști – Lucașeuca culture in our area of interest, generating a significant reduction of habitation traces to the east of the river Siret towards Prut river; however, to the west novel important residential centers emerge on the Siret, transforming this valley into the main economic artery of the region, while forts are being built in the Eastern Carpathian mountains (on both flanks); this coincides with the founding of the historical Dacian Kingdom (and its various splinter factions), with the nucleus in nowadays Transylvania, with a specific materiality, cultural and social traits, that irradiates to the east of the Carpathians; in this period, more precisely in the second half of the 1st century AD are archaeologically visible the first sporadic incursions of Sarmatian nomads in the East Carpathian area.

Considering the above mentioned situations, we consider that the terminology developed for the archaeological realities of the Scythian area (with its specific periodization), or for the material culture of the European Celtic groups (Latene chronology) or for Northern Thrace cannot be appropriately used in describing the local realities of the period between the 5th and 3rd centuries BC in the East Carpathian area, as the cultural and historical evolutions were oftentimes different.

Thus, in this work we will use neutral terms, such as *Late Iron Age*, while chronology of sites and objects will be provided (when possible) in years and centuries. Regarding the problem of the

beginning of the Late Iron Age in this area, we may mention that in Romanian historiography at least, there seem to be a consensus about the beginning of Late Iron Age in the areas to the south and east of the Carpathians around the 5th century BC²⁶. Thus, our period of interest could be best framed as the *early part of the Late Iron Age*²⁷.

Regarding the problem of the identity of the populations who built the hillforts, their particular name and the question of their ethnic affiliation, these represents a particular theme that we are going to discuss in the *Conclusions* of our work, based on the few historical sources that we have at our disposal.

1.1.5. Excavation techniques and other observations

In the following we shall discuss a number of important aspect, referring to the digging techniques used to investigate the hillforts. Without claiming to be exhaustive, in the following we will present a number of general observations made both by us and our predecessors who excavated in these sites. Some of the observations we will discuss below might be trivial for experienced archaeologists of the Late Iron Age. However, we consider it necessary to present them, as they may be useful to those who are less experienced in the archaeology of this type of monuments, for students and beginners in this profession.

Up to this moment, we have managed to execute test-diggings in three fortifications – Poiana Mănăstirii – *Între Șanțuri* (Iași County) with dr. Sergiu Enea as excavation coordinator, Dobrovăț-Cetățuia (Iași County) and Albești-Cetățuia (Vaslui County) with us as excavation coordinator, in general with relevant results. Interesting result were also obtained from a rescue excavation in the hinterland of the Crivești-Cetățuia hillfort (Iași County). For others sites we depend either on the results of older investigations, of varying quality and amplitude.

Investigating Iron Age hillforts is by no means an easy task. As most of the objectives are located in remote areas that are often forested or at a distance from modern localities, any archaeological campaign requires a strong logistical framework. The horizon of expectation regarding the quality and quantity of discoveries should not be unreasonable: while indeed in some forts had been found hoards composed of object of precious metal and artifacts of remarkable historical value (for example at Stănțești and Bunești), most of the time the inventory of the features is *quite modest*, comparable to that of simple, unfortified settlements. In some cases, such as Dobrovăț, the nearby unfortified settlement (La Livadă) offered *significantly richer material* and archaeological situations compared to those from the Cetățuia hillfort.

Invasive archaeological research dedicated to this kind of sites involves using specific approach strategies, considering that in a large part of them the cultural layers are rather thin and uneven, often interrupted by “empty spaces” of varying size. The use of magnetometric surveys is, of course, more than necessary as it can easily pinpoint the areas of interest. However, as access to such means is often unavailable or impractical due to various reasons, it could be useful to plan the excavation using long and narrow control trenches (no less than two meters wide), arranged in a network, covering as many sectors as possible inside the enclosure, while adopting extensions and cassettes in areas where archaeological complexes are identified²⁸.

In order to be able to accurately document and understand the *functionality* of the archeological complexes – especially when traces of dwellings are visible on magnetometric scans or identified in the control trenches (features such as post holes, hearths, burnt adobe agglomerations) – we believe it is necessary to project the excavations in cassettes / surfaces of *at least* 7 × 5 meters in size.

²⁶ IstRom 2001, p. 464–465; IstRom 2010, p. 478–511;

²⁷ See Măndescu 2010.

²⁸ As recommended since 1978 by Adrian C. Florescu (see Florescu 2022). A. C. Florescu used careful digging techniques which permitted him to quite accurately document a consistent number of surface dwellings during his investigations at Stănțești and Cotnari hillforts.

The presence of the archeological layer close to the surface, in many instances often at depths of only -0.10–0.15 m, implies transitioning from shovel to trowel immediately after the elimination of the thin vegetal layer. From the experience of our predecessors as well as from our own observation we can say that generally the thickness of the entire archaeological deposition is rather small: at Poiana Mănăstirii – *Între Șanțuri*, Dobrovăț-Cetățuia and Albești-Cetățuia hillforts the entire cultural layer generated by the surface dwellings was no thicker than 0,30 m and at -0,40 m the sterile layer appeared.

The often modest degree of conservation of the remains belonging to surface dwellings requires a careful and laborious excavation, leading to the delimitation of the areas where the burned walls collapsed (with numerous traces of burned adobe, more or less compact) and to the identification of the post holes that eventually might give us the direction of the wall's placement, and thus, the outline of the dwelling. So far, at Dobrovăț, Poiana Mănăstirii and Albești we have observed that usually only the upper part of the dwellings wall tends to be burned, while the lower parts generally disintegrate into the soil, leaving little traces. That means that most of the time the line of the post-holes marking the outer walls base does not correlate with the agglomerated remains of the burned wall. The position of the agglomeration of burned wall remains can be located either in the middle of the dwelling, in a corner, or outside of it, depending on the direction in which the walls collapsed.

The use of intermediate sections is more than useful, as they can sometimes give precious clues in identifying and documenting stratigraphically the evolution of the dwelling: the level of construction, the level of habitation and the destruction level. The documentation and harvesting of the burned adobe – from the areas with high agglomeration – must be carried out with special attention, taking note especially of the fragments that keep imprints of beams; they can provide us with most valuable information on the architecture – at Albești hillfort, for example, we were able to make very interesting observations.

The *excavation of the defensive system* (usually consisting of a rampart and a ditch) involves special efforts, directly proportional to its magnitude and complexity. At Dobrovăț hillfort, due to digging in a densely forested area we excavated the defensive system using a narrow trench, but in the area of the palisade we extended it with a cassette. In any case, making narrow trenches (1–2 m wide), as was often done especially in the past, might not be sufficient to document specific situations (the palisade, for example); wider sections can offer much better scientific results, thus the digging of these features require a solid material base as well as a consistent workforce.

In any case, besides its difficulty, the investigation of these hillforts is a long and continuous process. This present volume, no doubt, represents an accumulation of data and interpretation from *the current stage of research*, that will be completed and revised by future investigations and generations of archaeologists.

I.2. Geographical conditions of the area

I.2.1. Limits

For a long time in the literature, the introduction and description of the geographical framework of a historical subject was a mechanical aspect, more a historiographical tradition, rarely succeeding in providing a viable link between history and geography. The understanding of the connections between people and nature, the relationship between the geographical environment and the habitat or the importance of natural resources in relation to social structures and activities remained peripheral. Without claiming to solve this problem, the volume tries to take into account all these elements and introduce them into the discussed historical equation.

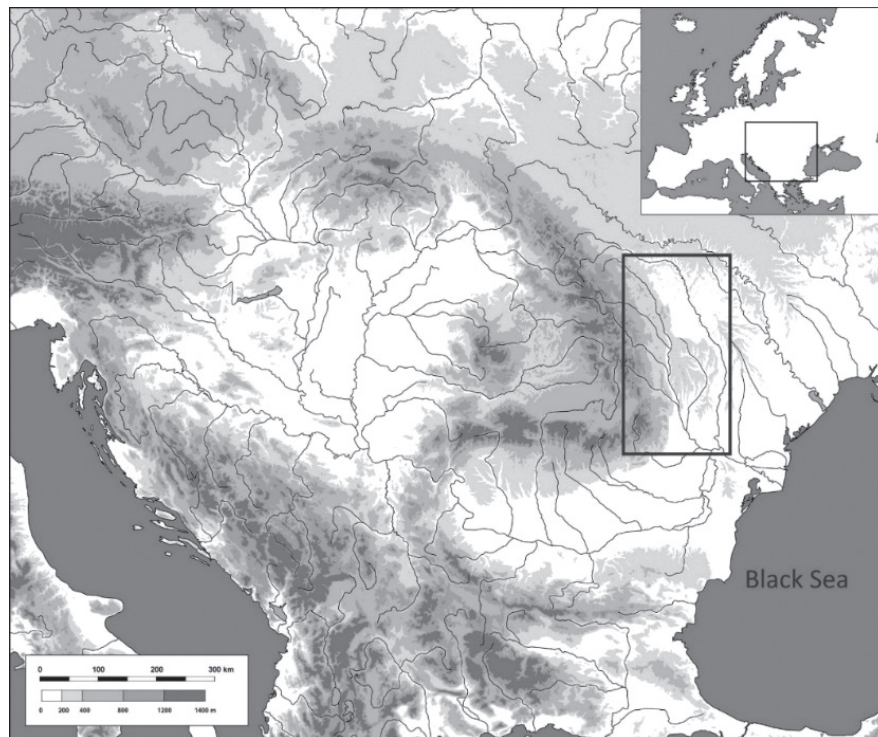


Figure 7. Map of South-Eastern Europe with our area of interest.

From the very beginning, it must be said that this paper analyzes a geographical area – the East-Carpathian region of Romania – delimited more or less conventionally. From an administrative point of view, almost the entire targeted area is on the territory of Romania, occupying entirely the counties of Suceava, Botoșani, Neamț, Iași, Bacău, Vaslui, Galați and partially the county of Vrancea. The area corresponds roughly with the *province of Moldavia* from Romania.

The northern and eastern limits are represented by the Prut river, the western limit coincides with the western limits of the Siret River basin and the southern limit is represented by the Râmnicu Sărat River – affluent of the Siret. The limits, especially the Prut river are conventional, as the phenomenon that we discuss in our volume extended itself to the east until as far as the eastern banks of the Dniestr²⁹; however, we choose to stop at the Prut river due to problems related to access to materials, information and various other objective constraints.

From a macro geographical point of view, our area of interest presents itself as an open space, with the exception of its western limits – the Eastern Carpathians – but even these mountains did not represent, historically, an unpassable barrier, being cut through by numerous valleys and passes. Generally speaking, we are literally at the borders of the Great Eurasian Steppe.

To the north, there is an opening towards the Podolian Plateau and further towards the Northern European Plain and the Baltic. To the east, from the eastern foothills of the Carpathians as far as the Ural and Caucasus Mountains, there are no other notable natural obstacles. To the south, only the Danube stood in the way of connections with the Balkan, Anatolian and Mediterranean worlds. As much as we would like to avoid interpretations based in geographical determinism or historicism, we cannot fail to notice the reflection of these characteristics in the historical destiny of the area throughout the millennia – a zone of interference, subject to invasions and migrations from various directions which often brought social and cultural transformations.

²⁹ Zanoci 1998; Arnăuț 2003; Haheu 2008.

1.2.2. The Eastern Carpathian Mountains

The *Eastern Carpathian Mountains*, which are present on the western limit of the area analyzed by us, extend between the northern border of Romania with Ukraine³⁰ and up to the Prahova Valley, where they border the Southern Carpathian Mountains³¹. They occupy a total area of approx. 33,257 km², and present a number of specific features: the parallelism of peaks and valley corridors; the more accentuated massiveness of the mountain ranges on an East-West direction, conjugated with an altimetric decrease in the same direction; the presence of valley corridors and large depressions with a longitudinal and transversal disposition towards the mountain axis, which conditions the appearance of discontinuities in the landscape³².

Geographically, the Eastern Carpathians Mountains were divided into three groups: the northern group, the central group and the southern group³³.

From the *northern group*, in our area of interest are the Rodnei Mountains with the highest altitude of 2303 m (Pietrosu Rodnei Peak), the Suhard Mountains with a maximum height of 1932 m (Omul peak) and the Obcinele Bucovinei with the highest elevation of 1588 m (Lucina Peak in Obcina Mestecănişului). From the point of view of the landscape, the area has a fragmented relief, characterized by high massifs and prominent peaks. The degree of fragmentation is reduced from west to east. The area offers relatively few subsoil resources that can be exploited with the technical means available in Antiquity.

The hydrography is rich; the soils are specific to mountainous and forest area. Current vegetation is characterized by alpine meadows (above 1500–1600 meters), and extensive pine and beech forests at lower altitudes. The current climate is characterized by Baltic and Oceanic influences, with an average rainfall of about 1000 mm / year and a medial yearly temperature of about 6° Celsius³⁴. From an archaeological point of view, in this area we do not find fortifications at the level of the 5th–3rd centuries BC. This is probably due to a lower population density caused by the specific mountainous habitat, but could also represent a state of research, the area being one of the least investigated from an archaeological point of view in entire Romania.

The existence of mountain passes such as Prislop (1416 m), Mestecăniş (1099 m) and Paşcanu (1040 m) have ensured over time the communication routes between the communities living to the East of the Carpathians and those living in nowadays Transylvania and Maramureş depression. In Maramureş, hillforts similar to those in the East-Carpathian areas being identified at Solotvino-Cetate and Bila Cerkva (Ukraine)³⁵.



Figure 8. The Eastern Carpathians. The Ceahlău Massif viewed from Crucea Albă in Durău locality (photo by A. Berzovan).

³⁰ We are discussing only the Eastern Carpathian Mountains that are located on the territory of Romania.

³¹ Velcea 1983, p. 600.

³² Velcea 1983, p. 600.

³³ Velcea 1983, p. 600.

³⁴ Velcea 1983, p. 600.

³⁵ Rustoiu 2008, p. 80–82.

From the *central group* of the East Carpathian Mountains, in our area of interest are the Giumalău Massif, with an maximum altitude of 1857 m (Giumalău Peak), Rarău massif, with 1651 m (Rarău Peak), Bistriței Mountains with maximum height of 1859 m (Budacu Peak), Stânișoarei Mountains with the highest elevation at 1530 m (Bivol Peak), the Ceahlău Massif (1907 m – Ocolașu Mare Peak), Giurgeu and Hășmaș Mountains (1792 m – Hășmașu Mare Peak), Tarcăului Mountains (1664 m – Grindașu Peak), Goșmanu and Berzunți Mountains (1293 – Murgoci Peak), Ciuc and Nemira Massifs (1649 m – Nemira Peak). Heights tend to decrease from west to east³⁶, as well as the fragmentation of the relief. The most prominent of all these massifs is Ceahlău, that presents a very large view shed covering almost the entire East-Carpathian Area of Romania, being visible on clear days from distances as far as 200–300 km and even more. The vegetation, climate and soils are similar to those of the northern group, with the notable mention that the presence of depressions often generates during winter temperature inversions³⁷.

The area offers little natural underground resources that could have been exploited by ancient communities. The existence of mountain trail roads – many of them clearly attested in the Medieval period, but likely used since Prehistory, as well as a number of important passes, such as Păltiniș (1359 m), Borsec (1105 m), Petru Vodă (900 m), Pângărați (1256 m), Ghimeș (1006 m) and Oituz (886 m) assured the connection between the communities living on both sides of the mountains. Archaeologically speaking, no hillforts from the 5th–3rd centuries BC have been identified so far in this area, a fact that may have various explanations considering that other kinds of sporadic discoveries (coins, settlements) from this timeframe had been sporadically mentioned in this region.

The *southern group* of the East Carpathian Mountains – also called the Curvature Carpathians³⁸, is represented, in our area of interest by the *Vrancei Mountains*, with the highest altitudes in the Goru (1785 m) and Lăcăuți (1777 m) peaks. The altitudes are generally lower, and the fragmentation of the relief is somewhat more reduced compared to the areas previously discussed. The vegetation is specific to mountainous areas, dominated more by deciduous forests. A number of important trail roads – attested as such in Middle Ages, likely used also in Prehistory – passed across the mountains connecting the communities on both sides of the Carpathians. The area presents two important natural resources, that could have been exploited with the technological means available in Ancient times: salt and gold, the last one being extracted through panning until historical times in the area of the Râmnic Valley. Archaeologically speaking, the area is rich in various finds from the 5th–3rd centuries BC, with representative monuments such as the Bârsești Necropolis³⁹ being located here. There could be hillforts from this timeframe in the area, but the state of research is limited.

1.2.3. The Eastern Subcarpathian Hills

Immediately after the Eastern Carpathians come the *Eastern Subcarpathians Hills*⁴⁰. They present maximum heights between 700–900 m. The current vegetation is dominated by deciduous forests; soils are specific to forest region, but in depressions chernozems are also found. Their disposition on a length of 2° and 30' in latitude explains the change of current medium annual temperatures from 9° C in southern areas to 8° in the northern one, and of the annual precipitation quantity from approx. 670 mm / year in south to around 770 mm / year in the northern areas⁴¹.

The Eastern Subcarpathian Hills can be divided in multiple areas. The Subcarpații Neamțului, delimited to the west by Stânișoarei Mountains, to the east by the Moldova River and to the south by the Bistrița River present low heights, reaching 911 m in Culmea Pleșului and 592 m in Dealul

³⁶ Velcea 1983, p. 602–603.

³⁷ Velcea 1983, p. 602.

³⁸ Velcea 1983, p. 604–605.

³⁹ EAIVR I, p. 186.

⁴⁰ Roșu 1983, p. 626–629.

⁴¹ Roșu 1983, p. 628.

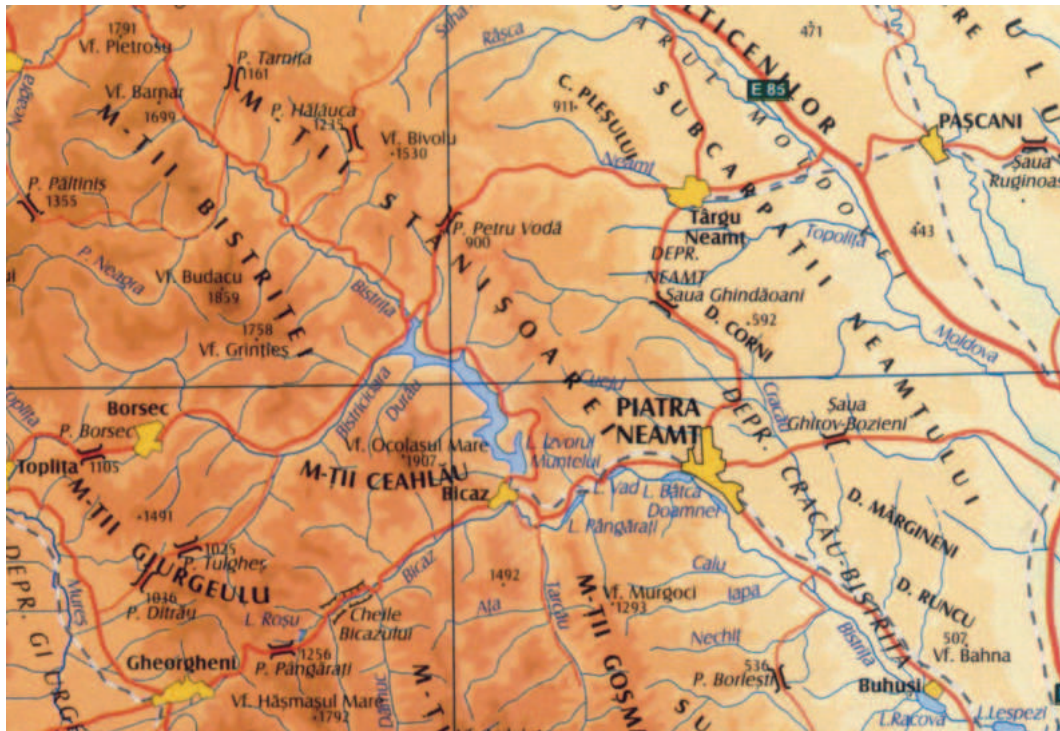


Figure 9. The central group of the Eastern Carpathian Mountains with the area of Subcarpații Neamțului (after Ielenicz 2000).

Corni. The area is rich in natural resources exploitable by ancient communities, especially salt. In the 5th–3rd centuries BC salt was likely exploited at Poiana Slatinei din Lunca (Vânători commune, Neamț County)⁴². For the moment, we know of a single hillfort, with a suggestive toponym-*Cetățuia Sărățica* [literally, the “Little Salty hillfort”]⁴³ in Dochia commune (Neamț County).

To the south of Bistrița Valley follow the Culmea Pietricica (717 m, Cărunta Peak) and the Tazlău – Cașin Basin, between the former and the Eastern Carpathians. The area is also rich in deposits of salt and salt springs that have been very likely exploited in our period of

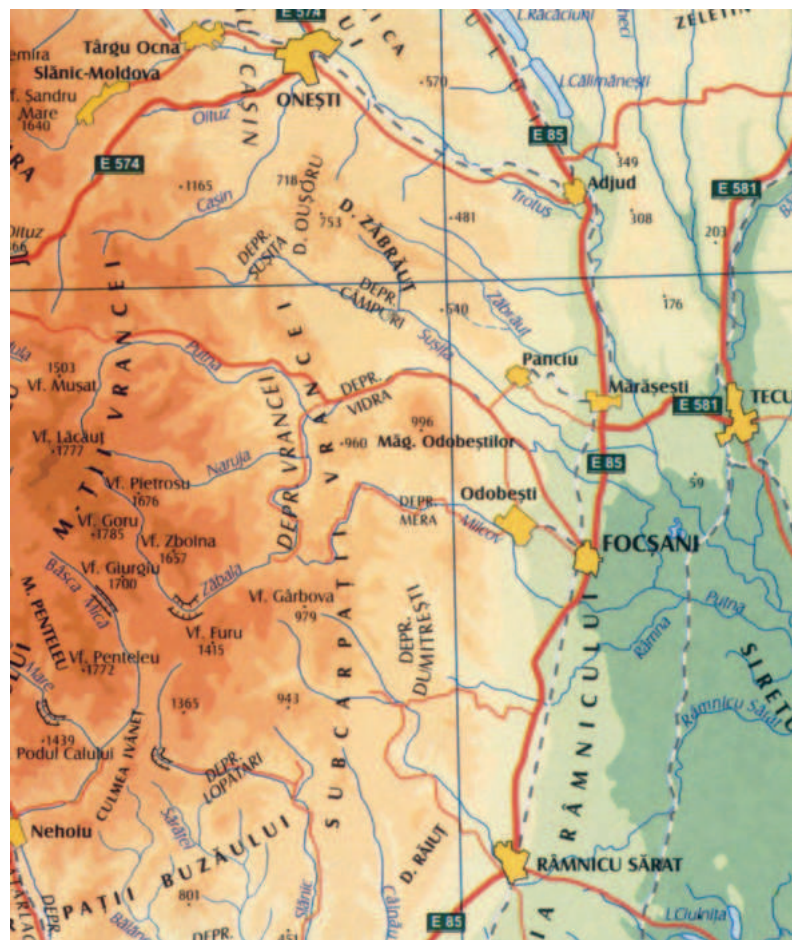


Figure 10. Vrancea Mountains and the Vrancea Subcarpathians (after Ielenicz 2000).

⁴² Alexianu *et alii* 2008, p. 23; Diaconu 2012, p. 125.

⁴³ For more details, see in this volume the relevant entry in *Chapter III*.

interest as shown by the discoveries from Cucuiești (Solonț Commune, Bacău County)⁴⁴. Up to this moment, however, no hillforts are known in this area.

Further, to the south of Trotuș River, are the *Vrancei Subcarpathians*. They are characterized by presence of depression (Mera, Vidra, Dumitrești, Câmpuri) but also by the presence of prominent hillocks, such as Măgura Odobeștilor (996 m).

It's a region rich in salt deposits and salt springs. Apparently, it was inhabited during our period of interest, as proven by the hillfort of Căndești (Dumbrăveni Commune, Vrancea County)⁴⁵.

1.2.4. The Moldavian Plateau

The largest area covered by our study – in which the *vast majority of the objectives* are located – is the *Moldavian Plateau*. It is delimited to the east by Eastern Subcarpathians, by the Obcinele Bucovinei in the north, by Prut valley to the east and the Wallachian Plain and Danube to the south⁴⁶. From a geographical point of view, the Moldavian Plateau has several units with distinct characteristics: Moldova – Siret Corridor, Suceava Plateau, Moldavian Plain, Bârlad Plateau and Covurlui Plateau, each of which has its specific subunits.

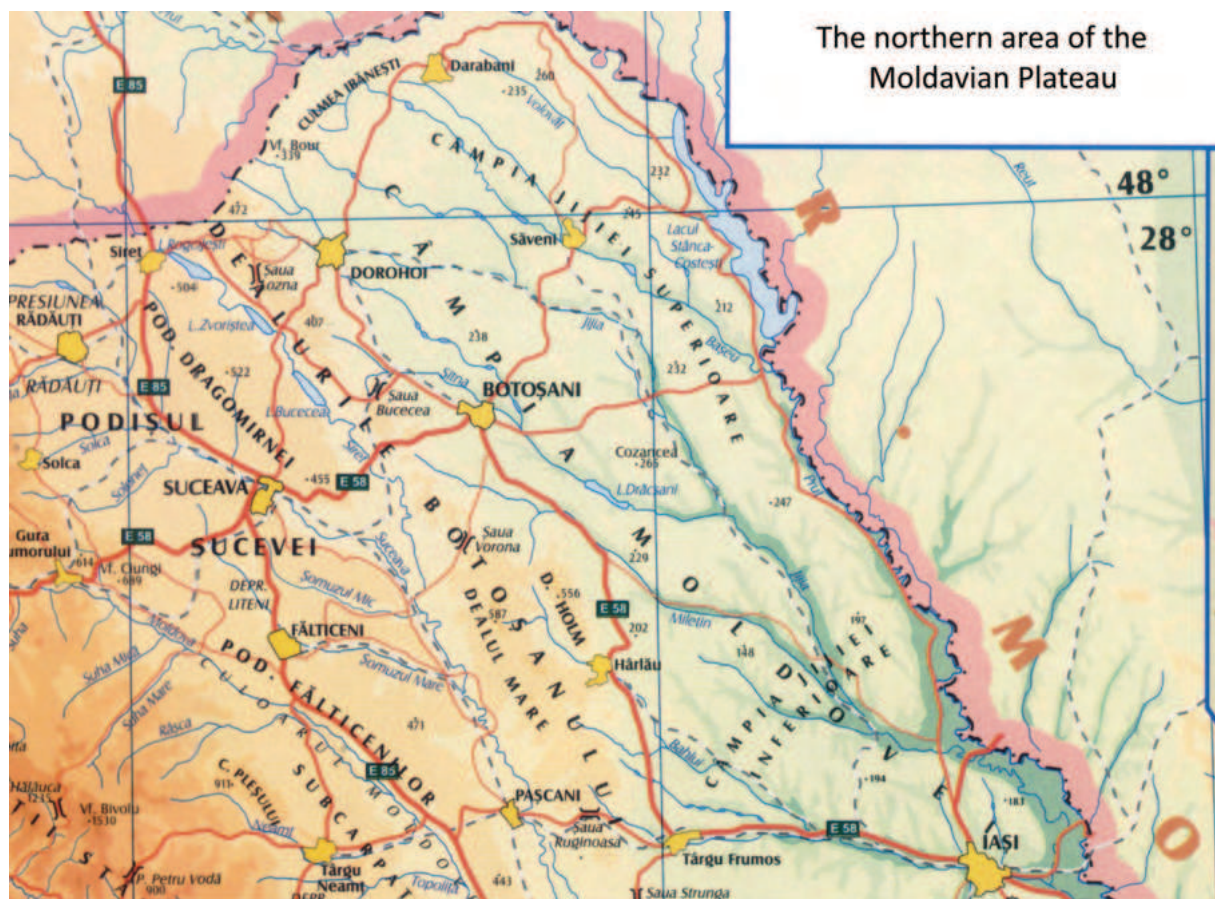


Figure 11. The northern area of the Moldavian Plateau: The Suceava Plateau and Moldova Plain (after Ielenicz 2000).

The *Moldova – Siret corridor* is located in the western extremity of the Moldavian Plateau, immediately east of the Moldavian Subcarpathians. It is characterized by the presence of high hilly massifs,

⁴⁴ Munteanu *et alii* 2007; Alexianu *et alii* 2008, p. 24.

⁴⁵ See in this volume the relevant entry in *Chapter III*.

⁴⁶ Băcăuanu *et alii* 1980, p. 9.

with altitudes of approx. 500–600 meters alternating with areas of hillocks and lower knolls⁴⁷. The hydrographic network is rich, being represented by the Moldova and Siret rivers, which present very well developed meadows and terrace systems, favorable for habitation in ancient times. From a climatic point of view, the proximity to the Carpathian area leads to wetter and colder climatic conditions than in the other units of the Moldavian Plateau, with average annual temperatures currently ranging from 7° C to 8.5° C and average annual rainfall of 700 mm (in high and western areas) to 500 mm in the lower areas⁴⁸. The soils are specific to forest areas, but in the low regions the chernozems also appear. The area is poor in subsoil resources exploitable with the technical means known in antiquity – however, towards the sub-Carpathian region are known salt water springs. Favorable living conditions but also the location on an important commercial axis – Siret Valley – led to the area being dotted with numerous discoveries from our era of interest (settlements, funerary discoveries).

Located in the northwestern part of the Moldavian Plateau, the *Suceava Plateau* [Podișul Sucevei] represents its highest geographical unit, characterized by a development of structural relief. The geographical orientation to the north generates a climate with Baltic influences, wetter and cooler, with average annual rainfall between 650–550 mm. It presents more subunits that we will briefly describe in the following. The *Dragomirna Plateau* [Podișul Dragomirnei] is located between the Suceava Valley and the Siret Valley. It has a relief with heights of around 500 m, with extensive structural plateaus bordered by steep areas. The area is still quite well forested today⁴⁹. There are few discoveries from 5th–3rd centuries BC known at this moment in the region. The *Fălticeni Plateau* [Podișul Fălticeni] occupies the Moldova – Suceava – Siret interfluvium, very similar in relief and appearance to the Dragomirna Plateau. The relief is characterized by the presence of large, domed hills, the altitudes oscillating between 400–500 m⁵⁰. In this area are known several discoveries from our period of interest, including the hillfort of *Merești-Cetățuia*.

Situated between the Siret Valley (to the west) and the Moldova Plain is the *Botoșani Hills*, also known as *Dealul Mare* (southern part) – *Bour Ridge* (northern part). It is characterized by the presence of relatively high massifs, of 400–500 meters, dominating with 200–300 m difference in level the lower surrounding areas, sometimes even 300–350 m. It is characterized by the presence of prominent peaks, well delimited by steep slopes, but also by the presence of wide structural plateaus⁵¹. There are four passes that facilitate the connection between the Siret Valley and the Moldavian Plain: Lozna Pass, Bucecea Pass, Vorona Pass and Strunga – Ruginoasa Pass, widely used in historical times by shepherds who came with herds from the Eastern Carpathians and sought to winter in the

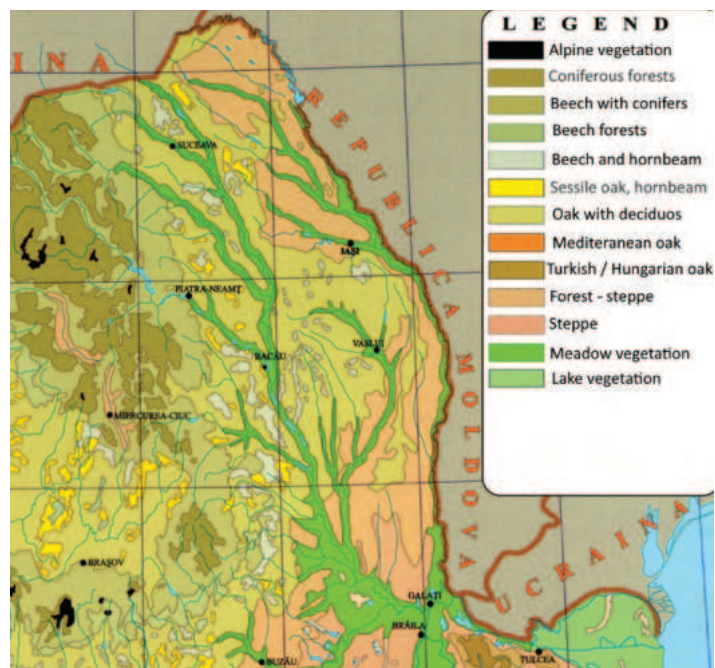


Figure 12. The East Carpathian Area of Romania. Map of natural vegetation areas (after Lungu 2018).

⁴⁷ Băcăuanu et alii 1980, p. 246–247.

⁴⁸ Băcăuanu et alii 1980, p. 247.

⁴⁹ Băcăuanu et alii, p. 276.

⁵⁰ Băcăuanu et alii, p. 276–277.

⁵¹ Băcăuanu et alii, p. 278.



Figure 13. The Southern Part of the Moldavian Plateau. The Bârlad and Covurlui Plateaus with various sub-units (after Ielenicz 2000).

largely semi-permanent hydrographic network, continental climatic influences, forest-steppe and steppe vegetation⁵⁶. Thus, the average annual temperature ranges between 8° and 9.6° C and the average annual rainfall between 475 and 550 mm. The area has few natural resources that can be exploited with the technical means known in antiquity, the main richness being the fertile soils (chernozems). At the level of the 5th–3rd centuries BC, the area was (apparently) less inhabited; we know only two fortifications of a peculiar type located here (Victoria – Șanțul Caterinei in Botoșani County and Scobinți-Grădiște, Iași County).

The *Bârlad Plateau* [Podișul Bârladului] is located south of the Moldavian Plain, bounded on the west by the Siret Corridor and on the east by the Prut Valley, its southern limits being roughly

Moldova Plain, or further eastwards, in the great Eurasian steppes⁵². The area was apparently densely inhabited during the 5th–3rd centuries BC period and in fact some of the *most significant hillforts* we will discuss in this volume are located in this particular microregion. Regarding natural sources, salt deposits have been known in the area of Hârlău (Iași County), exploited at least since the medieval period⁵³ as well as near Ibănești (Botoșani County)⁵⁴.

Bounded to the west by the Suceava Plateau, to the east by the Prut River and to the south by the Bârlad Plateau, the *Moldavian Plain* [Câmpia Moldovei] is a vast structural unit with a forest-steppe appearance, broadly circumscribed to the Jijia River basin⁵⁵. Its general characteristic is given by the wide undulating surface, located about 200–300 m lower than that of the surrounding hilly frames. The relief of the hilly plain is naturally associated with other physical and geographical characteristics: a

⁵² For the importance of Strunga – Ruginoasa pass, also called “The Gate of Târgu Frumos”, see Tufescu 1940, p. 364–373.

⁵³ Monah 2007, p. 87; Vitcu 1987, p. 27.

⁵⁴ Vitcu 1987, p. 27.

⁵⁵ Băcăuanu *et alii* 1980, p. 289.

⁵⁶ Băcăuanu *et alii* 1980, p. 289.

marked by the localities of Nicorești, Țepu, Ghidigeni, Vizureni, between Prut and Bârlad the limits passing along the cuestas of Jeravăț and Horincea. The relief is characterized by massiveness, with a more accentuated fragmentation in the northern area – which gives the landscape almost sub-mountainous characteristics (maximum heights around 400–450 m). The high, domed hills predominate, as do the wide structural plateaus. To the south of Vaslui, the plateaus and high hills give way to long knolls, separated by relatively parallel valleys. The average annual temperature ranges between 8–9.8, and the average annual rainfall between 450–600 mm, higher areas (over 300 m) presenting visibly colder and wetter climatic conditions than lower areas⁵⁷. From a bio-pedo-geographical point of view, the area is located at the interference between the area of the pericarpatic forests, the forest-steppe and the steppe, each with its specific features⁵⁸.

The northern part of the Bârlad Plateau is the so-called *Central Moldavian Plateau* [Podișul Central Moldovenesc]. The relief is characterized by a set of plateaus, hills and peaks separated by deep valleys, often asymmetrical, leaving the impression of a submountainous area. The maximum altitudes oscillate between 400–450 meters, and differences in level between 150 to 300 m. The area is heavily forested, representing nowadays the most compact forest area in Romania outside the Carpathian Mountains⁵⁹. There are no known subsoil resources exploitable with the technical means of Antiquity, but the area offers favorable conditions for farming in valley areas but also on plateaus. During the 5th–3rd centuries BC, the area was heavily inhabited, being signaled numerous points with discoveries but also a *significant number of hillforts*, the latter raised on dominant heights.

Located south of the coast of Racova, the area known as *Tutova Knolls* [Colinele Tutovei] is characterized by the predominance of narrow interfluvies, elongated at distances of tens of kilometers, bordered by valleys parallel to steep slopes⁶⁰. The area is characterized by forest-steppe vegetation. Numerous points for our period of interest are also signaled in this area, including *hillforts*.

To the south or Jeravăț valley, bounded to the west by the Bârlad river and to the east by Prut is the *Covurlui Plateau* [Podișul Covurlui]. The heights are quite low here, and the landscape resembles that of a high plain, with small, rolling hillocks. So far we do not know of any hillforts to be located in this area.

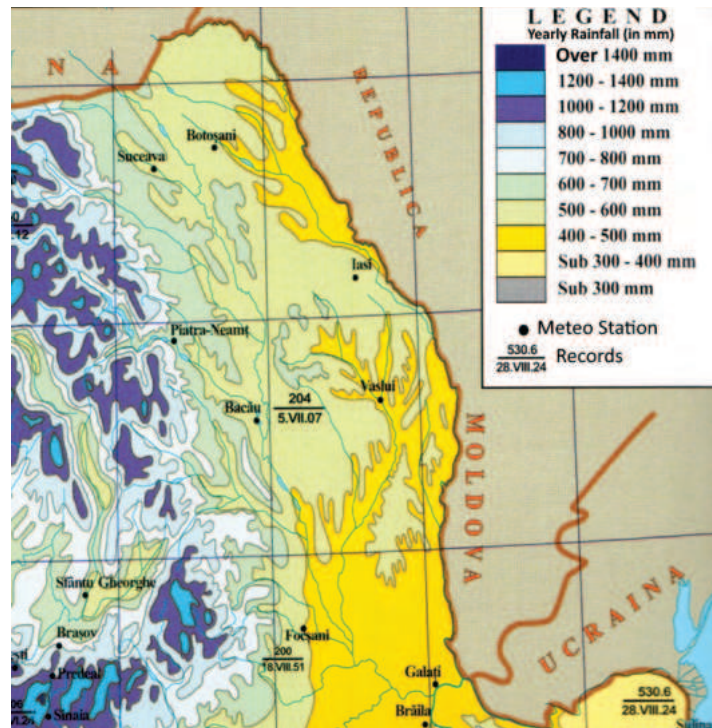


Figure 14. The East Carpathian region of Romania.
Map of yearly precipitations (after Lungu 2018).

⁵⁷ This climatic “layering” is especially pronounced in the autumn and spring months. For example, south of Iași, in the higher areas (Bârnova commune) the snow often remains one or even two weeks longer than in the lower areas of the Moldavian Plain and Jijia Basin.

⁵⁸ Băcăuanu *et alii* 1980, p. 297.

⁵⁹ Băcăuanu *et alii* 1980, p. 300.

⁶⁰ Băcăuanu *et alii* 1980, p. 314.

1.2.5. The paleo-environment

The problem of reconstructing the paleoclimate in our area of interest, for the 5th–3rd centuries BC. is a very difficult one, as we do not currently have a very consistent batch of analyzes. However, using the data obtained in recent years by various researchers, as well as the few data existing in the ancient literary sources we will try as much as possible to draw a preliminary picture.

From a climatic point of view, our period of interest coincides with the end of the Subboreal and the early part of the Subatlantic period⁶¹. The general consensus is that the period was marked by a cooling⁶², correlated by some authors with the geomagnetic Sterno-Etrussia excursion that took place around 700 BC in 15 regions of the Northern Hemisphere⁶³.

Of great importance in the problem of reconstructing the paleoclimate in the eastern Carpathian area are the analysis of the deposits in the Bukovynka Cave (Ukraine), located in the vicinity of our area interest⁶⁴. Thus, from around 1300–800 BC the East-Carpathian region seems to have been characterized by re-appearance of dark conifers, *Carpinus* (hornbeam), *Ericaceae*, ferns and trees belonging to *Quercetum mixtum* (oak). Also the appearance of *Cerealia* (grain) is noted. The phase after 800 BC up to around 200 BC corresponds with a better representation of *Quercus* (oak) pollen, and also an increase in mesophytic herb pollen, indicating a much wetter climate than in the preceding phase⁶⁵.

Historical sources such as Herodotus and other ancient Greek authors – even if their writings should be taken with a grain of salt – describe the regions of the northern Black Sea coast as chilly, covered with fog. Of course, for an ancient traveler coming from the warm Aegean and Mediterranean Sea, the climate of the Northern Balkans and northern shores of the Black Sea, with windy and snowy winters, would have made a strong impression. Yet the constant mentioning of grain and grain farming (either related to the so-called “Scythian farmers” or the mythical Hyperboreans) indicate that the territories north and north-west of the Black Sea offered in ancient times favorable conditions for the practicing of agriculture.

It is generally accepted that in Antiquity in what is nowadays Romania forests occupied a much larger area than today, extending even in the lowlands⁶⁶. Moreover, as shown by the osteological materials recovered from the hillforts of Stâncești and Cotu-Copălău (Botoșani County), suggest the existence of fauna specific to rich, densely forested areas⁶⁷.

The implications of a wetter and (possibly) cooler climate than the present one are quite large. It is very possible that most of the streams and watercourses that are currently semi-permanent could have been active throughout the entire year, offering ample water supplies to the inhabitants of the hillforts. Droughts – that currently represent one of the major climatic issues in eastern Romania – might have been significantly rare, thus offering the possibility of greater grain production and thus ensuring a steady demographic growth.

Moreover, a higher flow of water meant that the large rivers in the area – we have in mind here the Prut and the Siret – could have been, at least on their lower courses, navigable with larger boats. It would have been possible (even if not easy!) for the Greek merchants to advance with their ships on the Danube (ancient *Istros*) and further on, at least up to a few dozen kilometers if not even more up on the Siret and Prut.

⁶¹ Cărciumaru 1996, p. 10.

⁶² Cărciumaru 1996, p. 25. Gerasimenko 1997, p. 395, fig. 11.

⁶³ See Dergachev *et alii* 2004 with the bibliography.

⁶⁴ Gerasimenko *et alii* 2018.

⁶⁵ Gerasimenko *et alii* 2018, p. 10.

⁶⁶ Giurăscu 1976, p. 11–20.

⁶⁷ See the relevant discussion in *Chapter VII*.

■ CHAPTER II. HISTORY OF ARCHAEOLOGICAL RESEARCH

II.1. General considerations

From the very beginning we say that given the extent of the topic and the fairly consistent bibliography, we could not propose ourselves an exhaustive discussion, in which to take each actual written study separately, but we only intended to point out the main issues. In this sense, we insisted especially on the relevant contributions, but also on some less known and previously discussed data. We also did not neglect the issue of the institutional framework and its evolution⁶⁸.

We have divided the historiography of the issue into several stages, depending on political, social and cultural evolutions that affected Romania. Undoubtedly, they had echoes of varying intensity in both the quantity and quality of archaeological research, a fact we pointed out in several instances. The final subchapter is dedicated to our own contributions.

II.2. Late Iron Age hillforts between myth and legend

The remains of ancient fortresses scattered in the hilly lands to the east of the Carpathians have attracted the attention of people since times immemorial. Viewed with interest or at other times with superstitious fear, the ditches and ramparts burdened by past centuries have not left indifferent the inquisitive locals, who over time have created plenty of legends, stories and superstitions. Some of them have been lost, leaving behind only a few fairytale-like toponyms, while others still live today, not only in the memory of the elders, but also in that of the younger generations.

Thus, the traveler who will go to the fortress of Moșna (Iași County) and will have the curiosity to ask some older locals, will find out many stories about obscure rituals performed on the enclosure by local witches and about the supposedly accursed “*Aria de Aramă*”⁶⁹. The fortress from Poiana Mănăstirii (Țibana commune, Iași county), too, is seen by some villagers as an enchanted place. In the village of Dobrovăț (Iași County) there is a legend about a treasure buried on the “Cetățuie”, many inhabitants swearing that in the late autumn nights they have seen white flames coming from the ground, which indicate, in their opinion, the place where the hoard was hidden⁷⁰. Such legends about fabulous treasures also circulated about the hillfort from Cetățuia (Vaslui County)⁷¹, but also about other sites.

However, in most parts of the East Carpathian area, the remains of the Iron Age hillforts are associated in the popular lore with defensive fights against Tatar invasions or the actions of Voivode Ștefan cel Mare (1457–1504). Thus, the Cotnari-*Cătălina* hillfort is associated with a certain woman Cătălina, one of the many mistresses of the famous ruler; the one of Dumești / Rafaila – *Zarea Rafailiei* (Vaslui County) is sometimes called “the ditches of Ștefan cel Mare”⁷², while the one of

⁶⁸ For a version in Romanian, with some extended discussions on certain issues, see Berzovan 2021.

⁶⁹ Chirița 1893, p. 2; for other legends regarding the fortress itself, see Chirița 1893, p. 7–8.

⁷⁰ Whenever we went to dig at Dobrovăț area, one of our local collaborators always pleaded with us to make an archaeological trench in the area where he allegedly saw the flames.

⁷¹ Pamfil, Nicolau 1914, p. 3.

⁷² Berzovan *et alii* 2020a, p. 158, note 7.

Stănișești / Răchitoasa-Cetățuia (Bacău County) is considered to be the place where the Tatars hid their treasures in a big well⁷³, and so forth. The hillfort of Brăhășești (Galați County) was also considered for a long time to be the work of Ștefan cel Mare.

Instead, toponyms such as Victoria – *Șanțul Caterinei* [Caterina's Ditch] (Stăuceni commune, Botoșani county) indicate in some cases the association of sites in the collective mind with late historical events, during the Russo-Turkish wars of the 18th and early 19th centuries.

In any case, the way in which local communities perceive these hillforts and relate to them reverberates in the field of archeology more strongly than it would seem at first glance. Legends about treasures will inevitably attract treasure hunters “armed” with metal detectors, while a site seen as an “important” place for the community (for various reasons) is more likely to be treated with respect and protected. An unknown site is likely to be forgotten and neglected.

II.3. Research history up to 1918

Historians and chroniclers of the 16th and 17th centuries from the Principality of Moldavia while mentioning sometimes the ruins of ancient earthworks across the country, usually ascribed them generically either to the Dacians, Romans or the Genovese, in accordance to the spirit of the epoch. For them, the pre-Roman period was a distant, almost exotic period, as the few available informations were exclusively literary.

Illustrative for the state of knowledge of that time are some passages from Nicolae Costin's masterpiece, *Letopiseșul Țării Moldovei. De la zidirea lumii până la 1601*. For the author, the Getae originated in the North-Pontic steppes: “Înmulțindu-se neamurile în câmpii aceia dinspre Marea Neagră, atâta cât nu se mai putea într-acele locuri încăpea, ci s-au împrăștiat cu povățuitorii săi pen toate părțile de lume. Atuncea Gheții, Dații (...) find cursul anilor de la 5400, au nemerit pe aceste locuri” [“As the nations multiplied in those plains lying towards the Black Sea, so much that there was no more place for them, they spread with their leaders across all of the world. It was then that the Getae, Dacians (...)



Figure 1. Dimitrie Cantemir (1716)

at around year 5400, settled on these lands”] and arrived in the East-Carpathian area around 400 BC, “Acești Dați sau Dachi, cum am arătat mai sus, cu 400 de ani de mai nainte de nașterea Domnului și Mântuitorului nostru Isus Hristos s-au așezat pre aceste locuri și având megiiși pe Gheți, împreunându-se la un loc trecea Dunărea și multe prăzi și stricăciuni făcea...” [“These Datsi or Daki, as we have shown above, 400 years before the birth of our Lord and Saviour Jesus Christ settled on these lands, and having as neighbours the Getae, together they went across the Danube pillaging and ransacking”].

In various medieval documents we find mentioned earth mounds (mostly barrows), used as boundaries between various properties, or sometimes even the hillforts themselves [“cetate”, “cetățuie”]⁷⁴.

More interesting data come from the *Descriptio Moldaviae* of Prince Dimitrie Cantemir, written between 1714 and 1716. Thus, describing the county of Fălciu,

⁷³ See the discussions and bibliography in Berzovan *et alii* 2020a, p. 160.

⁷⁴ For example, a medieval document mentions a place called “Muncel” where used to be “cetatea lui Duma Negru”, [the fort of Duma Negru] (DRH, A, II, p. 161), a location that could be identified with the hillfort of *Poiana cu Cetate* (Grajduuri commune, Iași County). However, the subsequent documents make it clear that the document does not refer to a functioning fortress – a boyar court – but simply to a placename (see the discussion at Apetrei 2009, p. 250–251; Berzovan 2019, p. 50; Berzovan 2019a, p. 80–81).

Cantemir mentions the existence of a great fortification that he attributes to the historical Taifali. In his own words, “*in the thickest western forests, in five Italian miles range across the water (of Prut) they found remains of walls and towers made of burnt stones, and even if there are no other traces on that field, they have the look of a great enclosure*”⁷⁵. While the description is not very clear regarding the location of this particular site, the mentioning of the “burnt stones” and of the “enclosure” as well as the rather short distance from Prut river make us think that very likely the prince and his man could have stumbled upon the remains of one of the hillforts located in the former Fălciu county, possibly the one of Arsura or maybe Moșna.

Another interesting information about the existence of an ancient fortress at Mogoșești we found in the works of the early 19th century historian Dionisie Fotino. He mentions the presence of an ancient ruined fort in Mogoșești (Mogoșești commune, Iași County) that he considers to be the ruin of the ancient Dacian *poleis* Marcodava⁷⁶.

The beginnings of archeology in Moldova is related to the emblematic Late Iron Age and Roman period archaeological site from Galați – *Barboși*, to which Gheorghe Săulescu dedicated a first study in 1837⁷⁷. The intellectuals of the time, animated by the Latinist spirit specific to the period of the National Awakening of Romania, sought to bring to light and emphasize especially the Roman heritage⁷⁸.

The difficult political and economic situation of the Principality of Moldova during the 18th century and in the first part of the 19th century delayed the development of institutions and mechanisms for managing the archaeological heritage. In 1830, during a visit to the Hermitage Museum in Russia, Gheorghe Asachi wondered: “*Are there few such things hidden in the bowels of Moldavia? It is desirable that those that have them or would find them from now on to keep them as invaluable objects or to donate them to the Academy from Iași to be deposited in the National Museum.*”⁷⁹ Thus, in 1830, a Cabinet of Natural History and Medicine was established in Iași, which also had a Numismatic and Archaeological Cabinet. In the same year, an Archaeological Commission for the whole of Moldova was set up to deal with the discovered materials.

Also related to the name of Gheorghe Asachi is the realization of the first plan of the fortress from Cotnari-Cătălina (Iași county), the oldest for a Late Iron Age fortification from Moldova. It was published in an article entitled “*Catelina in Moldavia*”, published in the Iași periodical “*Almanah de Învățătură și Petrecere*” in 1854⁸⁰. If in the first part of his text Asachi focuses more on the name, which in the spirit of the time he links to Lucius Sergius Catilina and the Latinity of the Romanians, in the second part he tries to describe the fortifications. The sketch outlines quite correctly the two enclosures of the hillfort, most of the marked landmarks being visible today on the field. Unfortunately, 136 years passed until another complete plan of this site was published by the renowned archaeologist and historian Alexandre Simon Stefan.

In the second half of the 19th century, an important role was played by one of the pioneers of Romanian archeology, Alexandru Odobescu (23.06.1834, Bucharest – 10.11.1895, Bucharest)⁸¹. Between 1871 and 1873 Odobescu, then Minister of Cults and Public Instruction, sent to the teachers of Romanian villages a *Questionnaire* regarding the visible antiquities (forts, barrows, ruins) on the territories of the villages, their location, description and condition. The questionnaire also asked for the reproduction of any local legends or other informations about them⁸², with the declared scope

⁷⁵ Cantemir 1909, p. 47; Tocilescu 1880, p. 539.

⁷⁶ Fotino 1859, p. 67.

⁷⁷ Petrescu-Dîmbovița 1997, p. 171–172.

⁷⁸ The subject is beyond the scope of our work. For some more in-depth discussions, see Petrescu-Dîmbovița 1997, *passim*; Croitoru 2006, p. 53–70; Sirbu, Croitoru 2007, p. 13–26; Ioniță 2007, p. 71–80 with the bibliography.

⁷⁹ Mârza 2010, p. 75; Văcaru *et alii* 2019, p. 219.

⁸⁰ Asachi 1854.

⁸¹ Iosipescu 1992, p. 66–67.

⁸² Brătuleanu 2011.

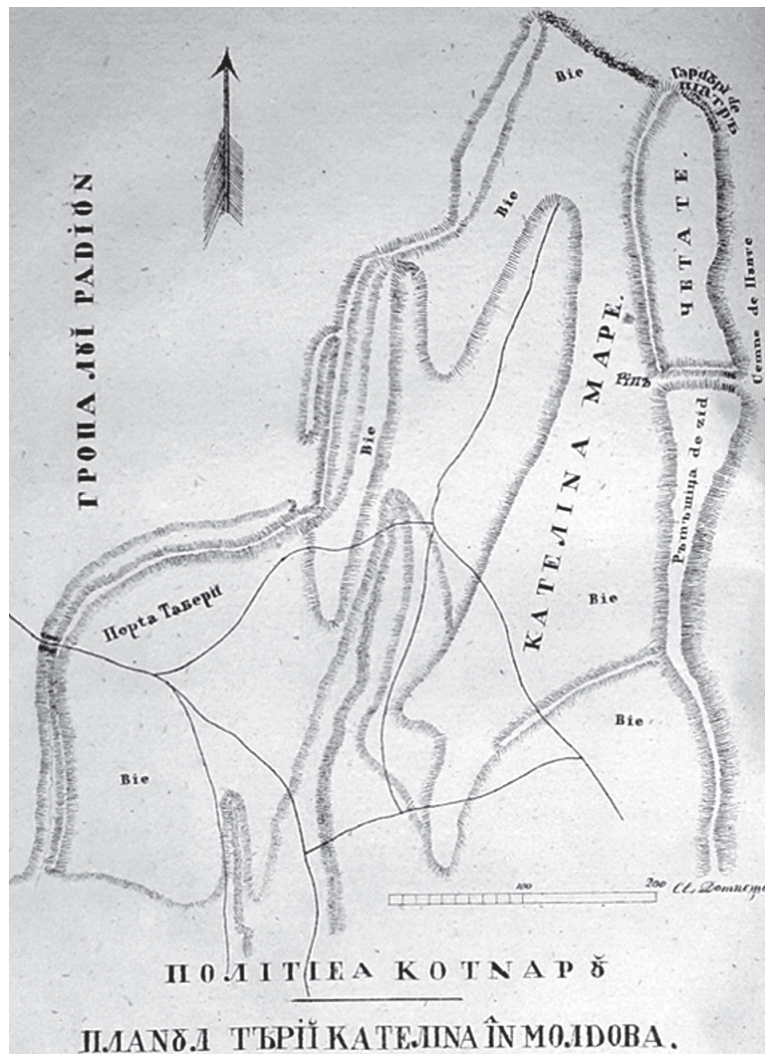


Figure 2. Plan of the Cotnari-Cătălina hillfort (after Asachi 1854). The legend is in transitional alphabet between Romanian Cyrillic and Latin.

and Teleorman counties). Only later, in few cases, Odobescu's contributions for Covurlui county (nowadays split between Galați and Vaslui county)⁸⁶ and Fălciu county (nowadays split between Iași and Vaslui county)⁸⁷ were edited and published by other authors.

At the turn of the 19th and 20th centuries, the *Great Geographical Dictionary of Romania* [Marele Dicționar Geografic al României] was published, in five volumes, edited by a larger group led by George Ioan Lahovary, C. I. Brătianu and Grigore Tocilescu⁸⁸. This monumental work gathered data from smaller, county-oriented geographical dictionaries. For

of "preparing the realization of a history of Romania, being necessary to gather from across the country knowledge about all the major places that were important in past times, either buildings or others, that are related to the deeds of the Romanian people's ancestors"⁸³.

The answers received varied quantitatively and qualitatively, from one county to another, but nevertheless the gathered material is of great value for the archaeologists, historians and ethnographers alike. In his questionnaire we find mentioned for the first time many of the hillforts we are talking about in this work, the related descriptions often being made with meticulousity. Unfortunately, for reasons that are not known to us, Odobescu published the answers only for two counties, Dorohoi⁸⁴ (in nowadays Botoșani county) and Romanai⁸⁵ (nowadays split between Olt, Dolj



Figure 3. Alexandru Odobescu.

⁸³ Bibliotheca of the Romanian Academy, Manuscript no. 225, f. 1 (after Clit 2019, p. 125).

⁸⁴ Odobescu 1871.

⁸⁵ Odobescu 1877.

⁸⁶ Petrescu-Dimbovița 1939.

⁸⁷ Clit 2019, p. 125–147.

⁸⁸ Lahovary 1899.

our problem of interest, the volumes are of great importance, as a number of Late Iron Age hillforts from the Eastern Carpathian region are first mentioned here and described, in some cases with interesting details.

From an institutional point of view, significant evolutions took place only in the last years of the 19th century. In 1894, the “Archeology Conference” was created in Iași, transformed in 1895 into the Department of Archeology and Antiquities within the University of Iași, the holder being Teohari Antonescu⁸⁹. In 1913, Orest Tafrali was appointed to the Department of Archeology and Antiquities at the University of Iași as the successor of T. Antonescu; under his auspices the Museum of Antiquities was established in Iași in 1916⁹⁰. Despite these evolutions, one cannot speak yet of an interest for the problem of the Iron Age hillforts. The scholars of the time were concerned with discovery of the Cucuteni Culture, that largely overshadowed any preoccupations for other historical and prehistorical problems⁹¹.

In Galați, at the end of the 19th century, based on the donation of academician Vasile Alexandrescu Urechia, a permanent exhibition was opened at the “Vasile Alecsandri” College, which included objects of plastic and decorative art, coins, documents and other documents from the modern era. A little later, in 1913, through the efforts of teachers Paul and Ecaterina Pașa, in a classroom at the Boys’ School no. 6 was organized an exhibition with cultural goods donated by the citizens of Galați.

In 1914, the Bârlad Museum was founded. Here, from 1913 onwards, appeared the history journal “Miron Costin”, with valuable studies. In 1914, T. Pamfil and V. Nicolau published the first plan of the hillfort from Cetățuia village (Puiști Commune, Vaslui County)⁹².



Figure 4. The first page of the article written by T. Pamfile and V. Nicolau about the hillfort of Cetățuia village (Puiști Commune, Vaslui County), named at the time Strâmba (left); The sketch of the fortress from Cetățuia from the same work (right).

In the region of Bukovina, which until 1918 was part of the Austro-Hungarian monarchy, there were more than a few intellectuals and historians concerned about archeology, with remarkable contributions⁹³. From an institutional point of view, on January 4, 1900, the “Museum” society was founded, in order to preserve and capitalize the historical relics, under the auspices of Alfred von

⁸⁹ Chirica, Aparaschivei 2004, p. 6.

⁹⁰ Chirica, Aparaschivei 2004, p. 6.

⁹¹ See Petrescu-Dîmbovița 1997.

⁹² Pamfil, Nicolau 1914.

⁹³ The subject has been treated in a number of well documented studies (for ex. Niculică 2014; Niculică 2015 with bibliography).

Peyersfeld. Among the first spaces that sheltered the museum's exhibits were two rooms in the new hotel of that time in Suceava, and then, after 1906, a few rooms in the city's barracks.

Regarding the researches, for our topic of interest, we may mention that the fortress of Merești-Cetățuia was present on *Charta Archaeologică a Bucovinei* [Archaeological Chart of Bukovina] made by amateur archaeologist Dionisie Olinescu⁹⁴. Moreover, the vestiges were discussed also by the famous architect, engineer and pioneer archaeologist Karl A. Romstorfer⁹⁵.



Figure 5. Karl A. Romstorfer.

In the great works treating the ancient history of nowadays Romania, that appeared at the end of the 19th century and the beginning of the 20th century, there is very little information about our topic. Grigore Tocilescu, for example, mentions the hillfort from Ibănești (Botoșani County) taking over the information collected by A. Odobescu⁹⁶, while other informations are taken from the 18th century works of Dimitrie Cantemir. The insistence on ancient literary sources was normal, archaeology was at this time at its beginning.

Oftentimes characterized by a romantic spirit, specific to the early days of archeology, the activity of this period marks the first steps towards proper, professional scientific research. Unfortunately, the fact that some important works such as the *Questionnaire* of Odobescu remained unpublished, deprived the scientific community of valuable information.

II.4. Research history between 1918–1945

The period following the Great Union of 1918 led to positive developments at an institutional level. The research activity within the Museum of Antiquities from Iași, corroborated with the didactic one, from the University, made necessary the establishment of a specialized institute. Thus, Professor Ilie Minea sought the transformation of the Romanian History Seminar into the Romanian History Institute. His repeated pleas to the government materialized only in February 1941, when as a result of a Decree – Law signed by marshal Ion Antonescu, the *History Seminar of the “Al. I. Cuza” University* is transformed into the *Institute of Romanian History “A. D. Xenopol”*, under the coordination of the Faculty of Letters and Philosophy of the University. In 1943, through the efforts of Professor A. Boldur, the Institute of National History “A. D. Xenopol” becomes a distinct research unit, within the Ministry of National Culture and Cults⁹⁷.

New institutions appear in the territory during this timeframe. Thus, in Suceava, after Bukovina united with Romania, the “Museum” private society is transferred into the administration of the Suceava Town Hall in December 1923. In 1934, the priest Constantin Matasă founds the Regional Archaeological Museum of Piatra Neamț. In 1934, Professor Constantin Solomon together with Mihail Dimitriu, laid the foundations of the Regional Museum of Archeology in Tecuci, bringing together collections of antiquities and ethnographic objects collected during field research conducted between 1925–1926⁹⁸.

Most of the archaeological activity during the interwar years was concentrated in the southern part of our area of interest. Radu Vulpe, who led the research team from Poiana (Galați County), performed on this occasion extensive archaeological surveys in the area. Field researches were also made in the (former) Covurlui and Tutova Counties by Mircea Petrescu Dîmbovița⁹⁹ and Corneliu Mateescu, who in 1944 presented a report towards the National Museum of Antiquities in Bucharest,

⁹⁴ Niculică 2014, p. 495–508.

⁹⁵ Romstorfer 1896, p. 111–112.

⁹⁶ Tocilescu 1880, p. 539.

⁹⁷ Chirica, Aparaschivei 2004, p. 7.

⁹⁸ Croitoru, Bodlev 2019, p. 199.

⁹⁹ Petrescu-Dîmbovița 1941, p. 426–446.

mentioning, among others, the hillforts of Fedești-Cetățuia (Șuletea commune, Vaslui County)¹⁰⁰ and Obârșeni-Cetățuia (Vinderei Commune, Vaslui County)¹⁰¹.

The only archaeological excavation in site relevant to our work, about which we have news, is the one carried out by C. Solomon in the fortress of Brăhășești (Galați County)¹⁰². Solomon executed two parallel trenches through the ditch and the rampart: one on the western side, and one in the south-eastern corner, while also executing other small scale survey-trenches. Despite the fact that he found only small numbers of “Getae and Greek” potshards, hearths and animal bones, he believed these traces were from an older settlement and the ditch and rampart belonged in his view to the Medieval Period, more precisely to the period of Ștefan cel Mare (1457–1504).

An important role was played by the military surveyor Pamfil Polonic, a former collaborator of Gr. Tocilescu, who left a series of manuscript works on the fortifications existing on the territory of Romania. For the East-Carpathian area he (apparently) did not do any fieldwork, but relied mainly on existing data from older sources (the *Questionnaire* of Odobescu, among others). In any case, the fact that most of his works remained in manuscript represented a loss for Romanian archeology, depriving it of timely access to valuable information¹⁰³.

Some of the most renowned works of archaeology written during this period in Romania by eminent archaeologist Vasile Pârvan, make no references to the problem of the Late Iron Age hillforts from the East Carpathian Area, as these were little known at this time; his discourse revolves mostly around the few historical sources mentioning various tribes and toponyms in our area of interest¹⁰⁴.

II.5. Research history between 1945–1989

The end of World War II and the establishment of the communist regime led to extensive institutional reorganizations. Thus, in 1964, the Institute of National History “A. D. Xenopol” is re-established as the “A. D. Xenopol” Institute of History and Archeology, attached to the Romanian Academy. Since 1953, a Department of Ancient History and Archeology was functioning within the Institute, that until 1968 also coordinated the activity of the Museum of Antiquities (since 1957, the History Museum of Moldova)¹⁰⁵. Thus, the “A. D. Xenopol” Institute becomes the focal point of Iași archaeologists. In 1961 the Institute began to publish the journal “*Arheologia Moldovei*”¹⁰⁶.

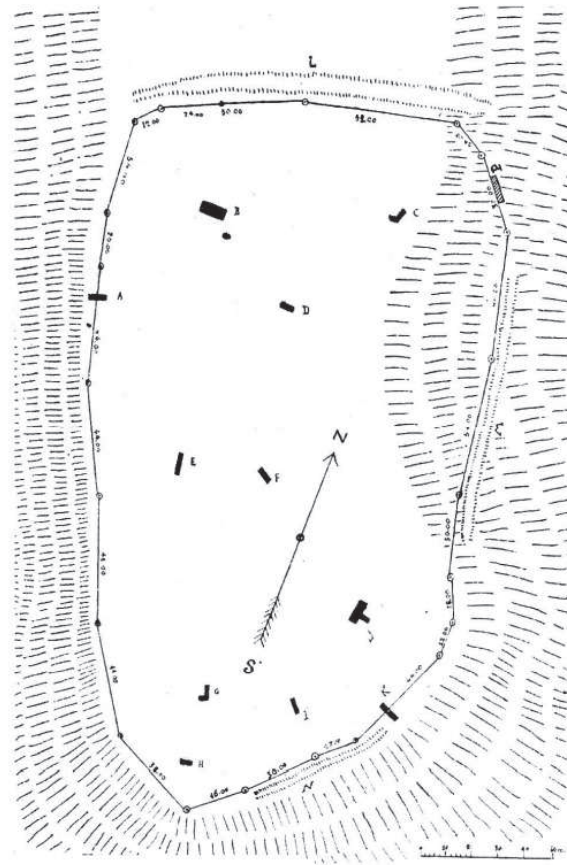


Figure 6. The plan of the Brăhășești hillfort drawn by C. Solomon (Solomon 1929).

¹⁰⁰ Mateescu 1944, p. 53.

¹⁰¹ Mateescu 1944, p. 54.

¹⁰² For a detailed descriptions of the excavations, as well as some biographic data on C. Solomon, see Croitoru, Bodlev 2019.

¹⁰³ For a discussion on P. Polonic, see Măgureanu 2013, p. 77–90; Măgureanu 2014, p. 115–114.

¹⁰⁴ For example, Pârvan 1923.

¹⁰⁵ Chirica, Aparaschivei 2004, p. 7.

¹⁰⁶ Chirica, Aparaschivei 2004, p. 7.

Similar evolutions occurred in other counties as well. On December 23, 1955, the Botoșani Raion Museum was established, led in a first stage by professor Mircea Popescu. In 1957, the management of the museum was taken over by professor Simion Rață, specialized in history. Over time, the heritage goods increased progressively in number. In 1968, the Natural Sciences section was moved to Dorohoi, and on December 3, 1977, the Botoșani County Museum was established. The Suceava Museum became in 1947 the Regional Museum of Bukovina. In 1968 the was changed into Suceava County Museum.

The museum in Bârlad continued its existence, and in 1957 was renamed the “Vasile Pârvan Museum”¹⁰⁷. In 1956, the Huși Municipal Museum was established, based on the collections from the former “M. Kogălniceanu” High School (nowadays “Dimitrie Cantemir”), “Cuza Vodă” High School as well as on private collections. In 1958, a scientific team was set up to take care of and enhance the collection¹⁰⁸. In 1974, the Vaslui County Museum was founded in the city of Vaslui, based mostly on the collections brought in by Ghenuță Coman. The Museum of Piatra Neamț continued its activity, changing its name several times. In 1957, the Museum of Bacău was established, which operated from 1959 with three sections: history, natural sciences and art. In Bacău, an important role was played by Iulian Antonescu, university professor, museographer, historian and publicist, who was its director between 1957–1971¹⁰⁹. In 1951 the Museum of History and Ethnography from Focșani was established.

Generally speaking, in this period, in all counties from our space of interest, new museums were established and most of them started publishing journals of their own, creating the necessary conditions for the development of modern archaeological research.

The hiring of a number of young researchers at the “A. D. Xenopol” Institute in the beginning of the 1950s, but also the ample research projects in which they were involved from the start – we have in mind here the major archaeological project “Valea Jijiei” – represented a new breath for the archaeological school of Iași, marking its complete professionalization. One of the representatives of this new generation of specialists, whose work left an important mark on our subject of interest, was *Adrian Constantin Florescu*.

* * *

A. C. Florescu was born in Glăvăneștii Vechi (Andrieșeni commune, Iași County) on 15th August 1928. He studied in Iași (1947–1951), attending in parallel both the Faculty of History and the Conservatory. According to most testimonies, Florescu was an individual with a complex personality, a polymath with interests not only in archeology but also in other fields such as engineering, topography, geology, soil sciences and even choral music¹¹⁰. He studied extensively not only the defensive systems of Iron Age forts but also of other earlier cultures¹¹¹ from the Bronze Age and Eneolithic, often together with his wife Marilena, also an archaeologist in the Iași Institute. Some of his studies remain a reference to this day.

As we have shown earlier, in the 1950s very little data was known about the Iron Age hillforts from the East Carpathian regions of Romania. The catalytic element seems to have come with the field survey conducted by Anton Nițu and Nicolae Zaharia, which brought to light a series of new data on the hillfort of Stâncești¹¹², leading to a reorientation of A. C. Florescu’s interests towards this chronological horizon.

¹⁰⁷ For a detailed history of this institution, see Arnăutu 1998, p. 245–271.

¹⁰⁸ <https://www.husi.ro/ro/muzee.htm>, accessed on 01.03.2021.

¹⁰⁹ Căpitanu 1991, p. 163–166; Ursachi 1971, p. 171–172; Mitrea 2002, p. 7–12.

¹¹⁰ Teodor 1987, p. 757–760.

¹¹¹ Sanie 1999, p. 203.

¹¹² Nițu, Zaharia 1955.

Between 1960 and 1970, A. C. Florescu carried out archeological excavations in Stâncești hillfort, the research being carried out every year, except for 1969. In 1968, the famous hoard of Stâncești was discovered, widely discussed both in Romanian literature and abroad¹¹³. In 1966, together with Gheorghe Melinte, A. C. Florescu carried out archaeological excavations in the fortress of Moșna (Iași County)¹¹⁴ while also participating together with his wife in the research of the complex archaeological site from Căndești (Dumbrăveni commune, Vrancea county).

However, Florescu dedicated most of his career to researching the hillfort of Cotnari-Cătălina (Iași County). From 1967 until 1985, A. C. Florescu carried out extensive excavations in what we call today *A Enclosure*, with the intention of transforming them into an “experimental polygon” for the problem of the Early / Late Iron Age fortresses. Furthermore, together with his brother Constantin – an engineer and topometrist – he projected an original installation to preserve and present to the larger public the defensive systems of the fortress¹¹⁵.



Figure 7. Photography from 1963, with various researchers from Iași. Front row (left to right): Irina Sitaru, Marilena Florescu, Șeiva Sanie; Back row (right to left): Adrian C. Florescu, Ecaterina Petrovici, Dan Gh. Teodor, Silvia Teodor, Eugenia Neamțu, Alexandru Andronic, Eleonora Vinkievici (after Lazarovici 2020).



Figure 8. Excavations inside Fort 1 at Stâncești (apud Florescu, Florescu 2005).

From the point of view of excavation planning, A. C. Florescu distinguished himself by resorting to modern techniques for his time. The Cotnari and Stâncești hillforts benefited from careful topographical surveys. In his excavations, A. Florescu used the technique of long, narrow trenches, with adjacent cassettes, but he also excavated in “open surface” in areas where the terrain allowed him to do so. He also took great care in documenting – both photographically as well as through drawing – the various situations that appeared during digging, while occasionally resorting to engineering sketches and reconstructions.

¹¹³ Florescu, Rață 1969, p. 9–22; Florescu, Florescu 2005, p. 70–78; Berzovan 2018c, p. 39–56; see also Berzovan 2020, p. 51–63.

¹¹⁴ Florescu, Melinte 1968, p. 129–134.

¹¹⁵ Unfortunately, the installation was destroyed in the period after 1990.

The last years of Florescu's life were marked by a gradual decline in his health. The wear and tear of the years spent on archaeological sites, which often involved great efforts, as well as certain personal disappointments probably had their role. On September 11, 1986 A. C. Florescu passed away as a result of an unexpected heart attack while having dinner with his wife.

The studies dedicated by Florescu to the discoveries from the early Late Iron Age hillforts appear to be few in number and quite reduced in scope, being limited to only a few titles. But this situation is rather misleading. In fact, Florescu has prepared for publication on this topic many large-scale monographic works: one dedicated to archaeological research in Stâncești and Cotnari, a three-volume monograph dedicated to research in Căndești and a work entitled *Cetăți traco-getice pe teritoriul Moldovei anterioare epocii Burebista – Decebal* [Thraco-Getic fortresses on the territory of Moldova before the Burebista-Decebal period]¹¹⁶.

The latter work illustrates very well the state of research in the 1970s, as well as the historiographical climate. The author describes the hillforts in his time, while insisting on the excavation techniques used in approaching this type of site. An important role in the structure of the work is played by the author's attempt to reconstruct – starting from an idealized scheme and using a series of elaborate mathematical calculations – the defensive system, as well as his analysis of the relationships between its various components, trying to even discover the units of measurement used during the Iron Age. There are unprecedented discussions in Romanian archaeological literature. Of course, many of these hypotheses have a high degree of uncertainty, and some of the author's assessments may seem quite bold, if not speculative.

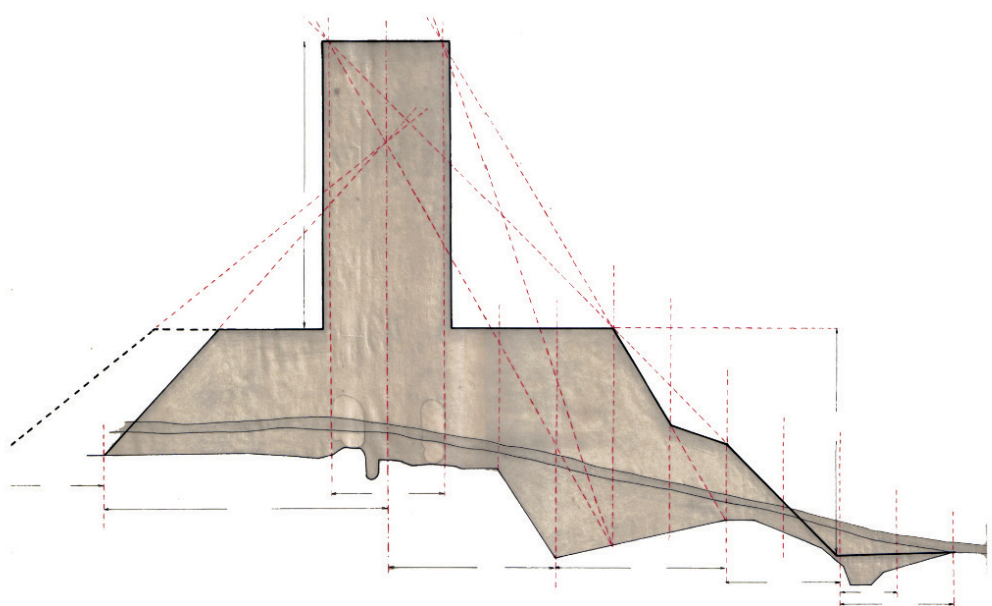


Figure 9. Attempt by A. C. Florescu to reconstruct the defensive system of the Brăhășești hillfort¹¹⁷.

However, A. C. Florescu also brings into discussion many other issues, which archaeologists studying this type of monument today, should reflect upon with utmost seriousness. For example, the geotechnical analyzes performed on the soils sampled from the structure of the defensive system of the Cotnari-Cătălina fortress, allowed Florescu to make a series of in-depth discussions on the natural slope angle, with important implications for understanding the structure as well as the evolution of the rampart. A resumption of these research directions would more necessary as today's technical possibilities are much greater.

¹¹⁶ This work was recently published by us in critical edition, see Florescu 2022.

¹¹⁷ Archive of the Iași Institute of Archaeology.

* * *

The Late Iron Age period was also approached by other members of the Iași Institute. In this context, in 1964 Silvia Teodor – a researcher dedicated to the Late Iron Age¹¹⁸ – carried out excavations in the hillfort from Arsura (Vaslui County)¹¹⁹, bringing to light precious data about the architecture of the complex ramparts defending this large enclosure. Furthermore, in the works that she published in this period, S. Teodor made frequent mentions of various finds from the hillforts¹²⁰.

Valuable archaeological excavations were also made by other archaeologists, professors and museographers. Thus, in 1967 Mihalache Brudiu and Paul Păltănea, going on the footsteps of C. Solomon, conducted excavations in the hillfort of Brăhășești (Galați County), concluding that the fortifications do not belong to the Medieval Period but to the Late Iron Age¹²¹. In 1975, excavations were carried out in the hillfort of Merești (Suceava County) by Dragomir Popovici and Mircea Ignat, bringing into discussion some novel data about this site¹²². In 1983, Ruxandra Alaiba conducted a small test-excavation in the fortress of Albești (Vaslui County)¹²³. Between 1986 – 1987, small – scale excavations were conducted in the hillfort of Ibănești (Botoșani County) by Paul Șadurschi and Emil Moscalu¹²⁴.



Figure 10. Photography during the discovery of famous hoards. The golden diadem from Bunești-Dealul Bobului hillfort (left); The hoard from Stăncești hillfort (right), Botoșani County Museum Archive.

The last decade of the period was marked by the activity of Violeta Veturia Bazarciuc (March 17, 1945, Costești, Vaslui county – October 13, 2000, Huși). Between 1969 and 1981 she worked as a museographer at the Huși Municipal Museum, from 1982 becoming director of the same institution. Starting with 1978, V. Bazarciuc begun excavations in the hillfort from Bunești-Dealul Bobului¹²⁵. This excavation brought to light one of the most spectacular objectives of this kind in our space and period of interest.

Thus, in the 1979 campaign, a hoard of silver ornaments was discovered¹²⁶, and during the 1984 campaign the famous *golden diadem* was found. The numerous, very significant discoveries made here in the 1980s (tools, weapons, pottery, imported artifacts, etc.) were the subject of a large number of papers, unfortunately of unequal scientific value¹²⁷.

¹¹⁸ For biographical data, see Lazarovici 2020, p. 19–23.

¹¹⁹ Teodor 1973, p. 53–60; Teodor 1994, p. 121.

¹²⁰ Teodor 1988, p. 33–51 (the relations with the Celtic world); Teodor 1989, p. 115–126.

¹²¹ Brudiu, Păltănea 1972, p. 225–239.

¹²² Popovici, Ignat 1981, p. 545–551.

¹²³ Alaiba 1997, p. 365–372.

¹²⁴ Șadurschi, Moscalu 1989, p. 183–199.

¹²⁵ Bazarciuc 1979, p. 33.

¹²⁶ Bazarciuc, p. 34.

¹²⁷ Bazarciuc, p. 33–36; Bazarciuc 1980, p. 61–80; Bazarciuc 1980a, p. 164–176; Bazarciuc 1981, p. 563–570; Bazarciuc 1983, p. 249–273; Bazarciuc 1983a, p. 211–217; Bazarciuc 1984, p. 169–182; Bazarciuc 1984a, p. 6–8; Bazarciuc 1986, p. 89–99; Bazarciuc 1987, p. 33–39.

* * *

Besides archaeological excavations, another achievement of prime importance during this period is the appearance of *archaeological repertoires*. Thus, in 1949, the Institute of Archeology of the Romanian Academy in Bucharest began working on a National Archaeological Repertory (RAR), by creating bibliographic files, an initiative much reduced after 1953 and completely abandoned in 1956¹²⁸; in the sheets that can be consulted online¹²⁹, we find references to some of the sites we addressed in our work.

In 1970, Nicolae Zaharia, Mircea Petrescu-Dîmbovița and Emilia Zaharia published a book – a first archaeological repertoire for the entire historical region of Moldova¹³⁰. Gathering a large number of archaeological discoveries from various historical and prehistoric periods, the work remains, undoubtedly, a landmark, being the first work of its kind in Romanian historiography. Many of our points of interest are discussed and mentioned here. The work, however, had its own share of problems, the more obvious among them being the lack of adequate cartographic support.



Figure 11. The protection structure of the researched area made by A. C. Florescu in Enclosure A of the Cotnari-Cătălina hillfort.

In 1976, the Archaeological Repertory of Botoșani County appeared, written by Alexandru Păunescu, Paul Șadurschi and Vasile Chirica¹³¹. Based on an almost exhaustive use of all documentary sources, compiled on the basis of a modern methodology for that time¹³², while also using an adequate cartographic support, the repertoire received the “Vasile Pârvan” award of the Romanian Academy.

Also related to the name of the much regretted Vasile Chirica is the creation of the *Archaeological Repertory of Iași County*, published in two volumes in 1984 and 1985, a fundamental work for our problem of interest¹³³. The result of the collaboration between a professional archaeologist (V. Chirica)

¹²⁸ Oberländer – Târnoveanu 2013, p. 15.

¹²⁹ <http://www.cimec.ro/scripts/ARH/RAR-Index/sel.asp?nr=1&NrSel=0&Lang=RO&IDRap=4531> (accessed on 24.03.2021).

¹³⁰ Zaharia *et alii* 1970.

¹³¹ RAJ Botoșani 1976.

¹³² Păunescu *et alii* 1979.

¹³³ RAJ Iași 1984; RAJ Iași 1985; see also the review, Ciubotaru 1986, p. 453–464; the answer to the review, Chirica 1987, p. 489–491.

and an amateur, Marcel Tanasachi¹³⁴, the volume brings into discussion valuable discoveries, the surveys carried out during its preparation leading to the discovery of a number of previously unknown hillforts in the Iași region (such as Poiana Mănăstirii, Bazga and others). Useful, well-made, but in certain ways more ideologically dependent on the “spirit of the times” is the archaeological repertoire made for Vaslui County by Ghenuță Coman, printed in 1980¹³⁵.

There were also works dedicated to the larger public, in which the various archaeological finds were presented in an attractive way. In this sense we may mention the book “*Itinerarii Arheologice Moldave*” [Moldavian Archaeological Itineraries]¹³⁶ written by archaeologist and historian Constantin Buzdugan, which refers to important hillforts such as that of Cotnari and Stănțești. History enthusiasts and collectors also played an important role during this period, many of them organizing small school museums in different villages and communes, gathering valuable archaeological material. For Botoșani County, we think of the I. D. Marin collection, with many artifacts recovered from the Stănțești hillfort, or the small museum from Țibana (Iași County), made by the teacher C. Alexa.

* * *

Archaeological research carried out during this period “furnished” the East Carpathian space with new and spectacular sites, bringing to light the most interesting data, which aroused interest among specialists from other universities, museums and research institutions in Romania. Thus, Ioan Horațiu Crișan makes references in his works to the discoveries from Stănțești¹³⁷, and to the “*deserving collective of Iași archaeologists*” who brought to light forts such as those from Cotnari or Moșna, which belong to the chronological horizon of the 5th–3rd centuries BC, proving the presence of a well-organized population, able to build large defensive networks¹³⁸. Hadrian Daicoviciu, another important historian of the period, also refers to the discoveries from Cotnari, especially to the presence of the stone wall¹³⁹. In the synthesis work dedicated to “Thracian-Getic” pottery, Emil Moscalu also discussed vessels discovered at Stănțești and Cotnari¹⁴⁰, while some of the observations and interpretations of A. C. Florescu were briefly mentioned in the work dedicated to the architecture of the Dacians, written by Ioan Glodariu¹⁴¹.

The important discoveries made during this period also had an echo in the historiography of neighboring states, especially in the Soviet Union. In the encyclopedic work entitled *Археология Румынии* [The Archaeology of Romania], G. Fedorov and L. Polevoi mentioned the discoveries from Stănțești, Cotnari and Moșna¹⁴². In the meantime, the discoveries from the Pruto-Dniestrian area discussed by I. Niculiță¹⁴³.

Overall, despite some ideological restrictions and some less-inspired research directions¹⁴⁴, the period proved to be fertile for our subject of interest both in terms of the quantity and quality of field archaeological researches. The most significant contributions belonged to the members of the Archeology Department of the Institute of History and Archeology “A. D. Xenopol” in Iași.

¹³⁴ Romanian literature high school teacher, he worked in the “Pioneers’ House” in Iași where he founded the circle of Archeology – Museology, organizing numerous trips and field researches with schoolchildren through Iași County.

¹³⁵ RAJ Vaslui 1980. See also the review, Babeș 1981, p. 615–617.

¹³⁶ Buzdugan 1981.

¹³⁷ Crișan 1969, p. 30.

¹³⁸ Crișan 1977, p. 113.

¹³⁹ Daicoviciu 1972, p. 12, p. 148.

¹⁴⁰ Moscalu 1983.

¹⁴¹ Glodariu 1983, p. 49.

¹⁴² Федоров, Полевои 1973, p. 124.

¹⁴³ Никулицэ 1977; Никулицэ 1987.

¹⁴⁴ See the discussions in Mihăilescu – Birliba 1997, p. 157–160; Vulpe 2010, p. 293–295.

Unfortunately, the fact that the archaeological monographs prepared by A. C. Florescu and M. Florescu remained unpublished represented an important loss for research, depriving the archaeological community of valuable data that would have been very useful if published timely.

II.6. Research history between 1990 – present

The extensive political changes that followed the December 1989 Revolution led to certain changes at the institutional level. Thus, on March 3, 1990, the Archaeology Department of the Institute of History and Archeology “A. D. Xenopol” became the Institute of Archaeology, under the aegis of the Iași Branch of the Romanian Academy.

Museums continued to evolve, but since the early 2000s, some of them have been closed for restauration works, a fact which had debatable influences on scientific research. Harder hit by this situation was the Museum of Huși, which housed most of the material discovered in Bunești hillfort. At the time of writing, this cultural institution is closed and without specialized staff.

As for the school museums, many of which had artifacts recovered as a result of field research in the area of different cities, their fate varied depending on the interest and quality of the staff who managed them. Some school museums, such as the “Mihai Constantin” Museum within the Ion Neculce Theoretical High School in Târgu Frumos, continue their positive evolution today, while others have been destroyed, the objects being thrown away or looted.

Archaeological excavations have continued but at a much more reduced pace than in the previous period, due to various reasons, from lack of finances to lack of specialists interested in the subject. The excavations at Bunești hillfort, that begun in the previous period, continued until 2000. In 1990, Emil Moscalu and Ștefan Scorțanu conducted a test excavation in the hillfort of Oțeleni / Bâra¹⁴⁵. The “Sărățica” hillfort from Dochia (Neamț County) benefited from several small-scale excavation campaigns led by Neculai Bolohan from Alexandru Ioan Cuza University of Iași¹⁴⁶. Between 1997–1998 in the hillfort of Fedești-*Cetățuia* (Vaslui County) Tamilia Marin carried out archeological excavations¹⁴⁷. Between 2003–2004 Octavian Liviu Șovan and Mircea Ignat resumed for a short period the researches in the hillfort from Cotu – Copalău (Botoșani County)¹⁴⁸. Between 2003–2010 Vicu Merlan conducted archaeological excavations in the Bazga hillfort (Iași County)¹⁴⁹, and in 2008 the same V. Merlan, together with T. Marin and Mădălin Văleanu made a number of test-trenches in the Moșna fortress (Iași County)¹⁵⁰.

V. Bazarciuc continued her work at Bunești hillfort. She published another article on the finds¹⁵¹, while preparing her PhD thesis on the “*Ornaments discovered in the Geto-Dacian forts and settlements in the East-Carpathian area*”¹⁵². Unfortunately, her tragic death in 2000 put an end to her ambitions to publish an archaeological monography of the Bunești site. Her PhD thesis also remained unpublished.

S. Teodor continued the work she begun in the previous decades. Thus, in 1999 she published a consistent book dedicated to the East-Carpathian regions of Romania in the 5th–2nd centuries BC¹⁵³. Despite some conceptual and content issues¹⁵⁴, the work manages to provide an overview of the

¹⁴⁵ Dumitroaia 1992, p. 287.

¹⁴⁶ Bolohan 1994, p. 22; Bolohan 1999, p. 37–39; Bolohan 2000, p. 37–39.

¹⁴⁷ Marin 1999, p. 40–41.

¹⁴⁸ Șovan, Ignat 2005, p. 14.

¹⁴⁹ Merlan 2007, p. 124–137; Merlan 2009, p. 3; Merlan 2010, p. 37–39; Merlan 2010a, p. 5–6. The short articles, many of them with debatable interpretations, were followed by a monograph of modest scientific level (Merlan 2018), unfortunately of little use for our work. We maintain reservations regarding the fate of the resulted archaeological materials.

¹⁵⁰ Merlan 2013, p. 3.

¹⁵¹ Bazarciuc 1998.

¹⁵² Marin 2000–2001, p. 470.

¹⁵³ Teodor 1999.

¹⁵⁴ See the review of Dragoș Măndescu (2001–2002, p. 124–137).

evolution of the space between the Eastern Carpathians and the Prut during the Late Iron Age, bringing into discussion a large quantity of archaeological material.

The year 2005 represented an unexpectedly good year for the research of the Late Iron Age hillforts, as two monographs were published: one dedicated to the site from Cotu-Copălău, signed by Octavian Liviu Șovan and M. Ignat¹⁵⁵, and another dedicated to the Stâncești hillfort, signed by Adrian and Marilena Florescu¹⁵⁶. The first contained the results of the investigations conducted at Cotu-Copălău both before and after 1989. Despite its undeniable merits, the monograph presents some problematic issues. Thus, out of the 19 dwellings identified – 15 from the Late Iron Age and four from the Eneolithic (Cucuteni Culture)¹⁵⁷ – only one has an illustrated plan. Also, the profile of the defense rampart and ditch does not benefit from the presentation of the horizontal stratigraphy, all these aspects making it difficult to understand the archaeological situation in its entire complexity.

The Stâncești monograph was written by Marilena Florescu largely based on the remaining manuscripts from her late husband A. C. Florescu. The loss of an important part of the documentation as well as of some identification data of the archaeological materials, to which is added the fact that a good part of the remaining manuscripts needed to be updated, leaves the impression of an uneven work. The ambiguities in description and chronology attracted some critiques from various specialists¹⁵⁸. Despite its shortcomings – taking into account the conditions in which it appeared – the work remains a positive achievement.

Perhaps the most important work written on the subject belongs to Dragoș Măndescu, being dedicated to the chronology of the early period of the Late Iron Age in the extra-Carpathian space¹⁵⁹. Very extensive and meticulously researched, the volume manages to bring to the fore new data on the chronology of objectives in the period and area of interest, which is why we appreciate that it will remain a useful working tool for a long time to come.

* * *

An important role during this period was (and still is) played by the group of researchers trained in Chisinau around the late professor Ion Niculiță, with remarkable results in researching early Late Iron Age fortifications on the current territory of the Republic of Moldova. Thus, in 1998 appeared the book by Aurel Zanoci dedicated to the fortifications in the extracarpathian space dated between the 5th–3rd centuries BC¹⁶⁰. Well designed and structured, the volume brings to light valuable information; despite some debatable issues, it still remains a fundamental work.

Another contribution is the book published in 2003 by the late Professor Tudor Arnăuț¹⁶¹, dedicated to the vestiges of the 7th–3rd centuries BC in the space located to the east of the Carpathians. Without focusing exclusively on the hillforts, the author looks at the phenomena that occurred in the above-mentioned chronological interval from a broad perspective, carefully discussing issues ranging from material culture to funerary rites and rituals. In 2008 was also published the book of Vasile Haheu, dedicated to the Thracian-Getian forts located east of the Carpathians¹⁶². Discussing mainly the repertoire of these objectives, the work also brings valuable information, complementing in some ways the aforementioned works.

A special place in the historiographical landscape is represented by the volume published by Andrei Corobcean in 2018¹⁶³, dedicated to the vestiges of the 5th–3rd centuries BC from the

¹⁵⁵ Șovan, Ignat 2005.

¹⁵⁶ Florescu, Florescu 2005.

¹⁵⁷ Șovan, Ignat 2005, p. 19–20.

¹⁵⁸ Măndescu 2010, p. 73–74; Бруйко 2014, p. 41.

¹⁵⁹ Măndescu 2010.

¹⁶⁰ Zanoci 1998.

¹⁶¹ Arnăuț 2003. See also Arnăuț, Naniu 1996, focusing on the Pruto-Dniestrian regions.

¹⁶² Haheu 2008.

¹⁶³ Corobcean 2018.

Carpatho-Dniester space as a source of ethnic interpretations. Without being exclusively related to the problem of hillforts, but dealing with a very important issue, namely the identity of the builders of these objectives, the work represents one of the few syntheses of theoretical archeology in Romanian historiography dedicated to the analysis of methods, concepts and interpretations from the archeology of the Late Iron Age¹⁶⁴.

* * *

There were other categories of contributions. Significant was the publication in 1990, by Alexandru Simon Ștefan, of the plan of the fortress from Cotnari, made on the basis of orthophotographs¹⁶⁵. Between 2015 and 2016, this hillfort once again came to the attention of specialists, on the occasion of the PROSPECT project of the Arheoinvest Platform within the “Alexandru Ioan Cuza” University of Iași. On this occasion, a magnetometric survey was carried out in *Enclosure A*, several aerial photographs and a partial reconstruction based on LiDAR scans were made¹⁶⁶.

We also mention the efforts of colleagues from the Department of Geography of Alexandru Ioan Cuza University of Iași, who in the context of their studies dedicated to landslides in the Moldavian Plateau also dealt with the way in which these geomorphological phenomena affect various archaeological sites, many of them hillforts from our area and period of interest¹⁶⁷.

We cannot overlook the work of some amateur archaeologists, such as Sergiu Ștefănescu, the one who first signals the fortress of Dumești / Rafaila – *Zarea Rafailiei*¹⁶⁸ and Marin Rotaru¹⁶⁹, even if some of their writings must be viewed with the necessary cautions.

* * *

After the year 2000, especially after 2010, archeological researches experienced an increasingly visible setback. It is not a phenomenon limited to the Moldavian space, not even to the level of research of the Late Iron Age, but one specific to the entire Romanian archeology. The most consistent problem – but not the only one – is the lack of funding. The reasons that led to this state of affairs are very numerous and a detailed discussion on them – necessary to be carried out sometime – is beyond the aim of this study¹⁷⁰. The increasing reorientation of museal institutions, and more recently of archaeological institutes of the Romanian Academy towards rescue archaeology – that brings rapid and often substantial incomes – has further accentuated the decline of scientific research and initiative.

Furthermore at the university level, there is a decline in interest for the Late Iron Age. This goes in parallel with a visible decrease, both in quantity as well as in quality of archaeological education in Romanian universities¹⁷¹. We may hope that in the future things will eventually change for the better, but at this moment there are no encouraging signs.

¹⁶⁴ See our review, Berzovan 2018.

¹⁶⁵ Ștefan 1990.

¹⁶⁶ See <http://arheoinvest.uaic.ro/research/prospect/> (accessed on 1.09.2021).

¹⁶⁷ Niculiță 2020, *passim*.

¹⁶⁸ Ștefănescu 1998, p. 187–188; Ștefănescu 2003, p. 540.

¹⁶⁹ Rotaru *et alii* 2004, p. 8. M. Rotaru was also the founder of the “Elanul Rural Academy” [Academia Rurală Elanul] which gathered among its ranks various history teachers and history amateurs from the Vaslui County, many of them having a keen interest in archaeology, especially in doing field surveys. The results of these surveys were published in the local journal “*Elanul*”.

¹⁷⁰ Berzovan 2021, p. 695–696.

¹⁷¹ For example, with the notable exception of the Babeș – Bolyai University of Cluj-Napoca, no other major Romanian university offers at this moment adequate preparation for students that wish to study the Late Iron Age. At the Alexandru Ioan Cuza University of Iași, since the death of Nicolae Gostar in 1978, no other specialist in Late Iron Age came to the department. Bucharest University at this moment also lacks specialists in the Late Iron Age. In these conditions,

II.7. Our own contributions

In this subchapter, we set out to briefly discuss the results of our own investigations. We did not intend a detailed discussion, but only to point out the main directions of research that we followed and to emphasize some of the concrete results obtained. In some cases our tone might be a bit too personal, but we felt the need to highlight some of the difficulties we had to surmount.

Before 2016, our scientific interests concerned the Late Iron Age (2nd century BC – 1st century AD) from western and south-western regions of Romania. Our first contact with the East-Carpathian hillforts of 5th–3rd centuries BC occurred, however, three years earlier, in 2013, as we were doing PhD studies at Alexandru Ioan Cuza University in Iași, coordinated by professor Nicolae Ursulescu. Together with colleagues (then PhD students) Ștefan Honcu, Ana Odochiciuc (Honcu) and Cătălin Cozma we made a field survey in the area of the Poiana Mănăstirii hillfort (Țibana Comune, Iași County). Based on our surveys, we made a preliminary sketch of the fort – to our knowledge the first ever – and the results were presented in the same year at several communication sessions in Iași¹⁷².

In 2016, we moved to Iași and become an employee of the Iași Institute of Archeology. At the advice of prof. N. Ursulescu and late V. Chirica, then chief of sector at the Prehistory Department of the Institute, we reoriented towards the study of the early period of the Late Iron Age. In 2016, with the help of several external collaborators, we started a series of extensive field surveys on the territory of Iași County, with special attention given to the Dobrovăț area. We gathered and presented, in a first paper, the results of the researches from Dobrovăț and Poiana Mănăstirii. At that time, we did not have to the high resolution DEM, and the presented plans and sketches of these objectives – nowadays, in some points outdated – were based solely on observations resulting from the field survey¹⁷³.

Fruitful collaborations were made with dr. Adela Kovács from the Botoșani County Museum. Together with her and Alexandru Kovács, we made several surveys in 2016 and 2017 to the hillforts of Stănțești and Cotu – Copalău, while also visiting other objectives from the early Late Iron Age in Botoșani County. In 2017, we have begun collaborating with Dr. Sergiu Enea (Ion Neculce Highschool of Târgu Frumos) and Dr. Dumitru Boghian (Ștefan cel Mare University of Suceava), wishing to start investigations in a Late Iron Age site. We decided to focus our efforts on the Poiana Mănăstirii hillfort, which we already knew quite well. A magnetometric scan covering a large part of the enclosure was carried out by dr. Carsten Mischka and Imren Tasimova (Erlangen University). In September 2017 we started a test excavation – with S. Enea as head of excavations. Due to lack of financing¹⁷⁴, we used the help of volunteers¹⁷⁵. We verified one anomaly – that proved to be the remains of a destroyed surface dwelling – and we straightened the collapsed bank of the northern rampart to get a section. An updated plan of the hillfort was also produced. The results – relevant, even if of modest scale – were presented in a few conferences and a number of scientific articles¹⁷⁶. With the same team, a field survey was made at Crivești hillfort and a sketch – with a few observations

the contact of students with the archeology of the Late Iron Age takes place exclusively in a number of general courses dedicated to the ancient history of Romania.

¹⁷² A. Berzovan, S. Honcu, *Putere și control în secolele V–II î.Hr. Un studiu de caz: fortificația getică de la Poiana Mănăstirii – “Între Șanțuri”*, at *Third Arheoinvest Congress. Interdisciplinary Research in Archaeology*, Alexandru Ioan Cuza University of Iași, Iași, 6.06.2013–8.06.2013; S. Honcu, A. Berzovan, *Putere și control în secolele V–II î.Hr. Un studiu de caz: fortificația getică de la Poiana Mănăstirii – “Între Șanțuri”* at the Symposium *The Iași Institute of Archaeology between Present and Past. Results of Archaeological Researches in Iași*, Iași Institute of Archaeology, 28.06.2013.

¹⁷³ Berzovan 2016, p. 215–247.

¹⁷⁴ At this moment, the Romanian Academy does not offer financing for archaeological excavations, thus researchers have to collaborate with local county museums or other sponsors.

¹⁷⁵ These came mostly from the “Geto Dacii din Moldova” historical reenactment group from Iași. We thank them for their efforts.

¹⁷⁶ Berzovan *et alii* 2017, p. 305–323; Enea *et alii* 2017, p. 403–405; Berzovan *et alii* 2020b, p. 39–50.

and materials were published in 2017¹⁷⁷. But in 2018 due to lack of funding and also logistic problems we could no longer continue the excavations at Poiana Mănăstirii.

The problem of the Cotnari-*Cătălina* hillfort, one of the most representative objectives of this period, represented a constant preoccupation. We attempted to gather all the available information – both from the older literature as well as from our own surveys in two distinct studies¹⁷⁸. However, despite our insitencies, at that time we did not manage to locate some of the sites mentioned by A. C. Florescu (for example the Scobinți – *Basaraba* hillfort); moreover, not having access to the archival data about the Cotnari hillfort, our interpretations regarding the archaeological situation were, in many parts, tributary to the few published data.

At the end of 2017, we learned from colleagues at the Faculty of Geography of Alexandru Ioan Cuza University of Iași about the existence of LiDAR scans performed by the Prut – Bârlad Basin Administration (ABA Prut – Bârlad) in 2012 on an area of approx. 22,000 square kilometers, covering a good portion of the East – Carpathian region of Romania. In 2018, together with late dr. Vasile Chirica from our Institute we made a collaboration protocol with ABA Prut – Bârlad, offering us access to the results of the scans¹⁷⁹.

In 2019 we wrote a study published in both English and Romanian in which we approached, based on the analysis of these scans and field surveys, the issue of the early Late Iron Age hillforts in the northern part of the Central Moldavian Plateau¹⁸⁰. Despite a few shortcomings¹⁸¹, the study remains one of the backbones supporting our present volume.

Also in 2019, we resumed the archaeological research by conducting a test-excavation in the Dobrovăț-*Cetățuia* hillfort¹⁸². Due to limited finances, our excavation affected a rather small surface: S 1 (7 × 5) m, which we extended with S 2 (3 × 3 m) and a small cassette. On this occasion we discovered the remains of a surface dwelling; the archaeological material, although fragmentary, was representative. In 2020, we continued the archaeological research in Dobrovăț, in the unfortified settlement in *La Livadă*.

In 2021, after winning the post-doctoral project trough which this volume is published, we continued the archaeological research in Dobrovăț, returning to investigate the “Cetățuia” hillfort. At the same time, we started digging together with the colleagues from the County Museum from Bârlad in the Albești hillfort. We continued with field surveys at all sites from the East-Carpathian region of Romania¹⁸³. All these results, obtained during field researches and excavations had been included and used in the present book.

¹⁷⁷ Boghian *et alii* 2017 p. 201–206.

¹⁷⁸ Berzovan 2017, p. 62–70; Berzovan 2018a, p. 325–334.

¹⁷⁹ Since access to raw data requires a special infrastructure (powerful PC and ample storage capacity) and also GIS programs that we did not have access to, we limited ourselves to requesting a mirror image, in .ecw format, of the DEM. This did not allow us to carry out detailed terrain analyzes like those made by other colleagues using raw LiDAR data (for ex. Ștefan, Ștefan 2021, p. 167–214 and others) but for our purpose – identification and mapping of hillforts and other kinds of archaeological monuments it proved to be more than useful.

¹⁸⁰ Berzovan 2019, p. 45–70; Berzovan 2019a, p. 77–101.

¹⁸¹ These are *two* and we shall mention them: a) the Bazga hillfort where V. Merlan executed archaeological excavations was located erroneously, about 400 m east from its real location; this is due to the fact that for this site field survey could not be made in time and we relied on the data from the RAJ IAȘI II 1985 and information received from the late V. Chirica, which did not prove accurate; b) the situation presented at Dobrovăț hillfort was unclear, due to the numerous modern interventions appearing on the DEM as well as on field as ramparts. The situation would be clarified only after our 2021 excavations.

¹⁸² Berzovan, Borangic 2019, p. 277–295. Financing came from our friend and collaborator Valentin Roman, president of the “Vatra Daciei” Cultural Association.

¹⁸³ Most of them published as distinct studies, with various collaborators from museum institutions in the East-Carpathian region: Niculică *et alii* 2021, p. 139–162; Berzovan *et alii* 2020a, p. 155–207; Berzovan, Kovács 2021, p. 323–333; Berzovan *et alii* 2021, p. 54–69.

■ CHAPTER III. ARCHAEOLOGICAL REPERTOIRE

III.1. Hillfort Repertoire

III.1.1. Albești-Cetățuia (Vaslui County)

A. Albești-Cetățuia / Cetățuia Vladnic; in the older specialized literature, the point is ascribed to the Vutcani commune, appearing under the name “fortress from Vladnic”¹⁸⁴.

B. Field research in the second half of the 19th century and early 20th century conducted by various history teachers and enthusiasts; surveys by R. Vulpe in the 1950s; surveys by A. Florescu, Gh. Melinte in 1970; test-excavations conducted by R. Alaiba in 1983; field survey performed by A. Berzovan, M. Oancă, M. Mamalaucă in 2020; archaeological excavations conducted in 2021 by A. Berzovan, M. Oancă, M. Mamalaucă.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the southern area of the Moldavian Plateau, more precisely in the Fălciului Hills area. The site occupies a slope on the right bank of the Cetățuia valley, bordered on the north by Mălăiești Hill and on the south by Ursoaia Hill. The landscape is dominated by small, elongated hillocks. The absolute altitude is between 240–250 m, the point dominating with approx. 20–25 m in height the neighboring riverbed. The area of visibility is quite narrow; the role of the fort seems to have been to control and defend access to the valley. **C.1.a.** The area of the fortress is covered at this time by rare forest, with a few small clearings. **C.1.b.** The state of conservation is relatively good, the landslide from the stream is somewhat stabilized; some areas of the rampart and ditch are affected by modern interventions.

C.2. The hillfort is located in the vicinity of the Cetățuia / Vladnic brook.

C.3. 46° 30' 39" N, 27° 54' 41" E.

C.4. 240–250 m.

C.5. 20–25 m.

D. Description

D.1. Hill-slope fort; single enclosure.

D.2. 4th–3rd centuries BC. **D.2.a.** Eneolithic (Cucuteni Culture); Bronze Age (Noua – Sabatinovka Culture); Middle Ages (16th–17th centuries).

D.3. Rampart with ditch.

D.4. Around 0.80 ha.

D.5. Description of the archaeological situation

The point was known since Odobescu's *Questionnaire*¹⁸⁵. In the Great Geographical Dictionary of Romania, the point is described as, “a place in Fălciu County with earthworks and surrounded by

¹⁸⁴ The name “Vladnic” refers to the former nunnery situated about a few hundred meters NV from the hillfort.

¹⁸⁵ Alaiba 1997, p. 365. Thus, according to the teacher Gheorghe Popescu from Albești: “This one is situated on the Vladnicu estate, North-East from Albești, in the middle of the forest, somewhat to the South of the Vladnicu Monastery, on a hillock of about 20 fathoms in height from the lowlands; at its Northern, Eastern and Western bends is surrounded by a ditch about 3 fathoms in depth, where even now one can't go up into the hillfort, and on the southern site there is a natural ravine of about 20 fathoms, where no one can climb to the height of the hillfort; the entry is formed by a bank of earth of

*a ditch; it is in the forest, near the glade and the Vladnicul brook, from the Vladnicul estate (Vladnicul monastery)”, [”loc în jud. Fălciu cu ridicături de pământ și înconjurat cu șanț; e în pădure, lângă poiana și pîrîul Vladnicul, de pe moșia Vladnicul (mănăst. Vladnicul)”]*¹⁸⁶.

In 1983, an archaeological survey was conducted in the area by Ruxandra Alaiba. The excavations were reduced in size¹⁸⁷. A small “ceramic complex” was found. According to the author, the stratigraphy consists of a thick vegetal layer of approx. 0.40 m, which overlaps the Late Iron Age habitation, found at about -0.50-0.70 m. Below appeared sporadic pottery fragments from the Bronze Age (Noua – Sabatinovka culture). The sterile layer was determined at around – (0.80–1) m depth. The recovered ceramic material consists mainly of fragments of hand-made jars, quite numerous¹⁸⁸, unfortunately not very expressive chronologically.

Our field research was conducted in the fall of 2020. We corroborated the mentions of our predecessors and the data from the DEM allowed us to make a series of observations. The south-southeast part of the fortress, towards the stream, is naturally protected by a ravine of approx. 15–20 meters, difficult to climb, affected by landslides, stabilized to some extent by forest vegetation. The northern, northwestern and eastern parts are defended by a rampart and ditch, describing a relatively uneven enclosure. The rampart has a current height of 2 to 5 meters and a width of 8–12 meters. The adjacent ditch has a depth between 2 and 4 meters and an opening between 6–11 meters. Small openings are observed along the route of the rampart; it is not clear in which cases we dealing with ancient gates or result of modern interventions. The total closed area is somewhere at approx. 0.80 ha, smaller than the previously estimated 1.5–1 ha¹⁸⁹.

Also on the occasion of our research, both towards the ravine and towards the edges, we found numerous remains of burnt adobe, fragments of ceramic vessels, mainly from Late Iron Age (4th–3rd centuries BC), but also pottery fragments belonging to Cucuteni Culture (phase difficult to specify due to corrosion, probably A) or those of the late medieval period, the latter in quite small numbers. This indicates a habitation of the enclosure in several historical and prehistoric periods; however, the type and extent of the defensive system pleads for its classification between the 4th–3rd centuries BC period.

In 2021, together with the M. Oancă and M. Mamalaucă from the Vasile Pârvan County Museum of Bârlad we made archaeological investigations inside the hillfort, opening a number of trenches: S 1 (21 × 2 m) and its extension S 2 (7 × 7 m), while also making two test trenches, SD 1 (2 × 2 m) and SD 2 (2 × 2 m). Additionally, S 3 was made outside the rampart and the ditch to verify the

around 6 foot, that in its northern side has a ditch around 2 fathoms in depth and in its southern one there is a natural ravine of around 15 fathoms; the entire surface of the “Cetățuia” is like a plateau, of around 300 square fathoms, having a round shape, on which many small mounds and pits are to be found. No one knows who built this hillfort, what kind of people used to inhabit it and when; it is only known that the Vladnic Monastery was built 400 years ago by Mateiu Negelu, inhabited by 100 monks with their abbot and scattered by Gheorghe Săulescu. In the Bibliothèque of m(ister) Săulescu may be written (...) about “Cetățuia” or in the documents of the estate”. [”Aceasta este situată pe moșia Vladnicu spre Nord-est de Albești, în mijlocul pădurii, înspre meazăzi de la Monast(irea) Vladnicu, pe o înălțime de deal de 20 stânjini socotiți de la nivelul șesului; la coturile despre meazănoapte, răsărit și apus este încunjurată cu un șanț adânc de 3 stânjini, pe unde nici acum nu se poate sui în cetățue, iar la laturea despre meazăzi se formează o adâncime naturală ca de 20 stînj(eni) pe unde nu se poate nimene urca la înălțimea cetățuei, intrarea în cetățue este formată de o limbă de pământ îngustă de 6 palme și care limbă la laturea despre meazănoapte are un șanț adânc de 2 stânj(eni) și la laturea despre meazăzi se formează o adâncime naturală de 15 stânj(eni); toată întinderea Cetățuei este unui podiș ca de 100 prăjini quadrate, având forma rotundă, pe care se găsesc mai multe moviliți și gropi. Nu s-au putut afla de la nimene de cătră cine este făcută ace(a) cetățue și de ce fel de oameni a fost locuită și pe ce timp; se știe numai că M(ă)n(ăstirea) Vladnic este făcută de 400 ani de Mateiu Negelu, care a fost populată de 100 monahi cu egumenul lor, și carii s-au împrăștiat de d(omnul) Gheorghe Săulescu. În Biblioteca d(omnului) Săulescu poate să fie scrise (...) Cetățue sau prin documentele moșiei”], (BAR, manuscris 225, f. 439–440, after Clit 2019, p. 141).

¹⁸⁶ Lahovari 1899, p. 349.

¹⁸⁷ Alaiba 1997, p. 366.

¹⁸⁸ Alaiba 1997, p. 366–367.

¹⁸⁹ Alaiba 1997, p. 366.

existence of a potential nearby settlement. In trenches *S 1* and *S 2* we manage to find the remains of a large surface dwelling from the 4th–3rd centuries BC, destroyed by fire. In test-trench *SD 1* we had found also a corner of a surface dwelling, while test-trench *SD 2* had fallen in an area that lacked archaeological features, only with sporadic potshards (Late Iron Age and Eneolithic) in the vegetal layer. Trench *S 3* did not offer any sort of archaeological finds. The archaeological diggings confirm the initial dating of the objective in the early part of the Late Iron Age.

E. Bibliography:

Chirița 1893, p. 29; Lahovari 1899, p. 349; Lecca 1937, p. 578; Vulpe *et alii* 1951, p. 228; Florescu, Melinte 1971, p. 131; RAJ Vaslui 1980, p. 278; Alaiba 1997; Teodor 1999, p. 184; Turcu 2002, p. 62; Rotaru *et alii* 2004, p. 8; Haheu 2008, p. 82; Berzovan *et alii* 2020a, p. 163–164; Florescu 2022, p. 60–61.

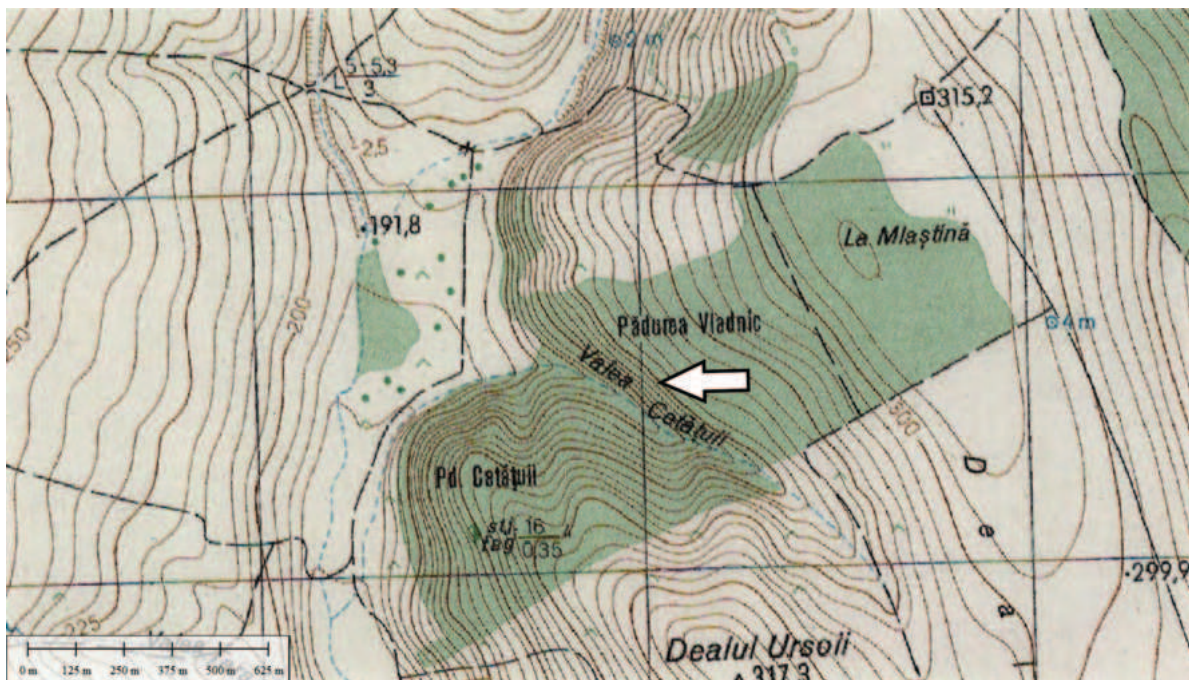


Figure 1. Albești-Cetățuia on 1:25 000 topographical map of Romania.



Figure 2. Albești-Cetățuia. 3 D image of the surrounding area (Google Earth).



Figure 3. Albești-Cetățuia hillfort. Aerial view with the research units opened during the 2021 campaign.

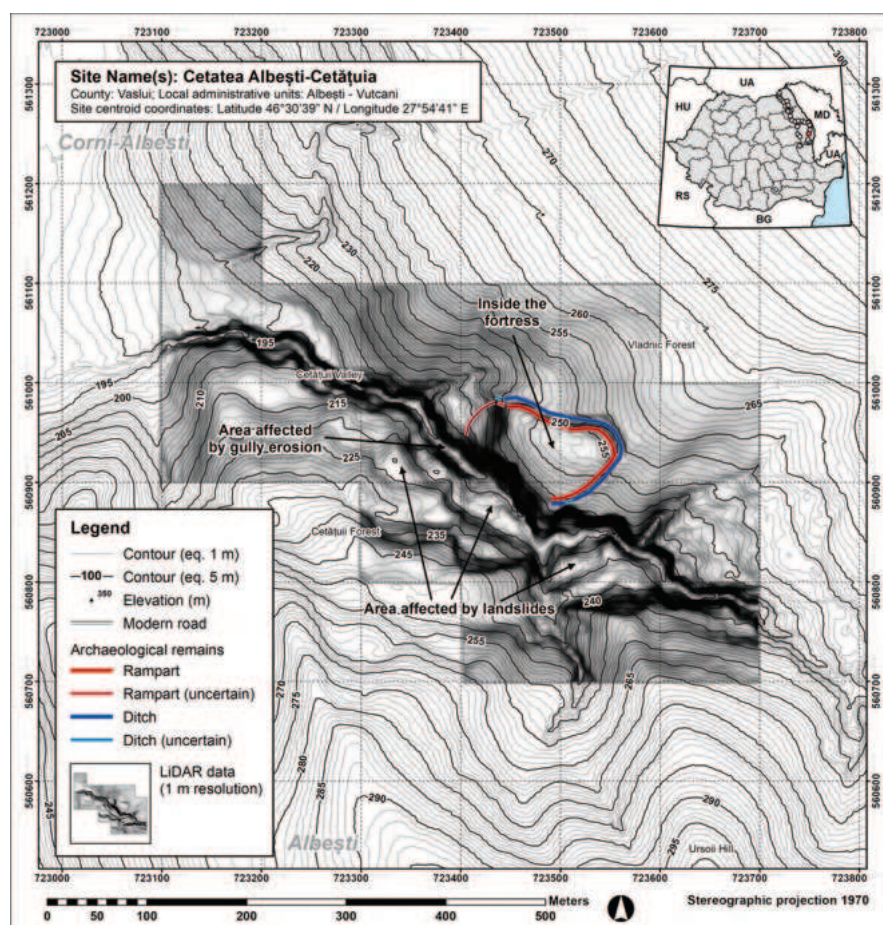


Figure 4. Albești-Cetățuia hillfort. Interpretation map.

III.1.2. Arsura-Cetatea Arsura / Cetățuia Mogoșești (Vaslui County)

A. Arsura-Cetatea Arsura / Cetățuia Mogoșești / Cetatea lui David.

B. Various surveys in the 19th century; test – excavation by S. Teodor in 1969; field surveys by Gh. Coman during 1960–1970s; field surveys by A. Berzovan 2018–2021.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the eastern part of the Central Moldavian Plateau. It occupies the eastern slope of the Mogoșești plateau, at the source of the Ruginos brook. In this area, the landscape is dominated by low hills. The viewshed area is quite large, especially towards the southern and south-eastern areas, to the west the view is obstructed by the existence of higher heights. **C.1.a.** Currently, the terrain is covered with overgrown orchards, agriculture land and young forest; **C.1.b.** The state of preservation is precarious, the site having been affected by numerous modern interventions.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 46° 49' 21" N, 28° 01' 27" E.

C.4. Approx. 325–375 m.

C.5. Around 50–70 m.

D. Description

D.1. Hill-slope fort; two enclosures.

D.2. 4th–3rd centuries BC. **D.2.a.** Early Iron Age; Poienеști – Lucașeuca culture (late 3rd – early 1st century BC); Middle Ages.

D.3. Ramparts (timber – box) with ditches (?).

D.4. Around 20–25 hectares (?).

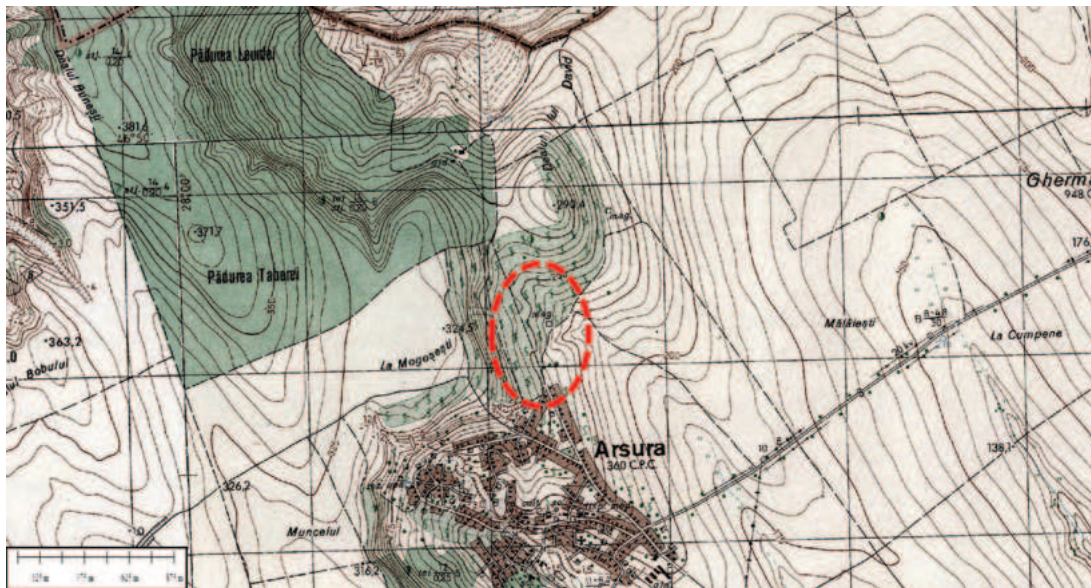


Figure 5. Arsura-Cetățuia Mogoșești hillfort on 1:25 000 topographical map of Romania.

D.5. Description of the archaeological situation

The site is known since the late 19th century, but we cannot exclude that its first mention belongs to Dimitrie Cantemir, in the early 18th century¹⁹⁰. Reconstruction of the plan raises many problems as the western sector is no longer visible on the ground, being largely destroyed by plantations of fruit trees and vines; even in the eastern sector, where the fortification elements are still somewhat preserved, they are very poorly visible. For these reasons, it is almost impossible to reconstruct at this time the precise plan of the hillfort, which theoretically covered an area as large as 20–25 hectares.

¹⁹⁰ See the discussion in *Chapter II*.

Small scale archaeological excavations were carried out in 1969 by Silvia Teodor. They focused on the fortification elements, bringing information about their construction elements. Thus, the almost fully flattened inner rampart is built of earth with a maximum preserved height of 1–1.10 m. The adjacent ditch has a depth of 2–2.50 m.

The second rampart (inner one) presents a more complex structure – probably a timber – box rampart. The archaeological finds (ceramics) suggest a broad range between 4th–3rd centuries BC. Traces of the Poienești – Lucașeuca culture were also discovered.

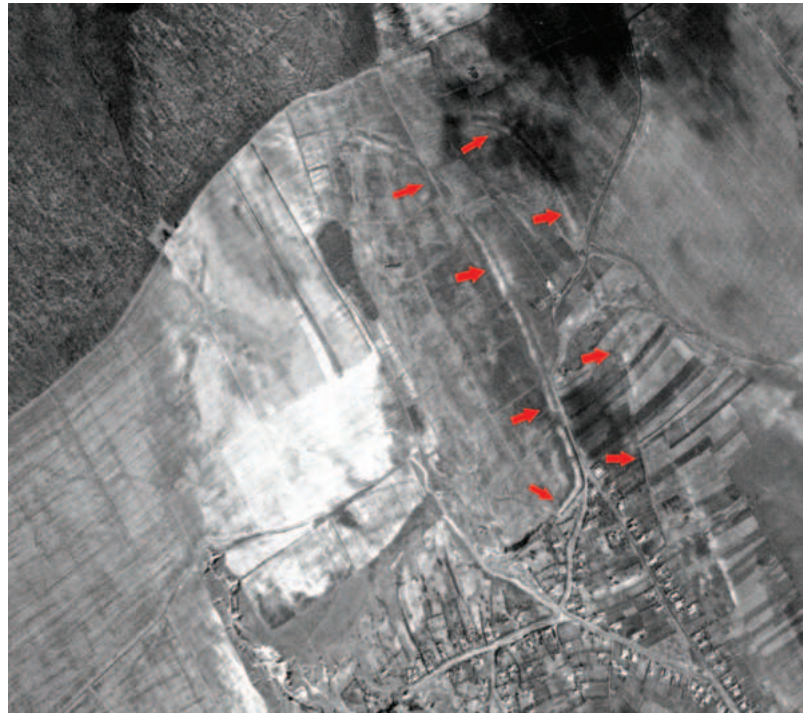


Figure 6. Arsura-Cetățuia Mogoșești hillfort. Satellite photo from 1978 made by the USA Airforce (after <https://earthexplorer.usgs.gov>). Red arrows pinpoint the location of the defensive system.

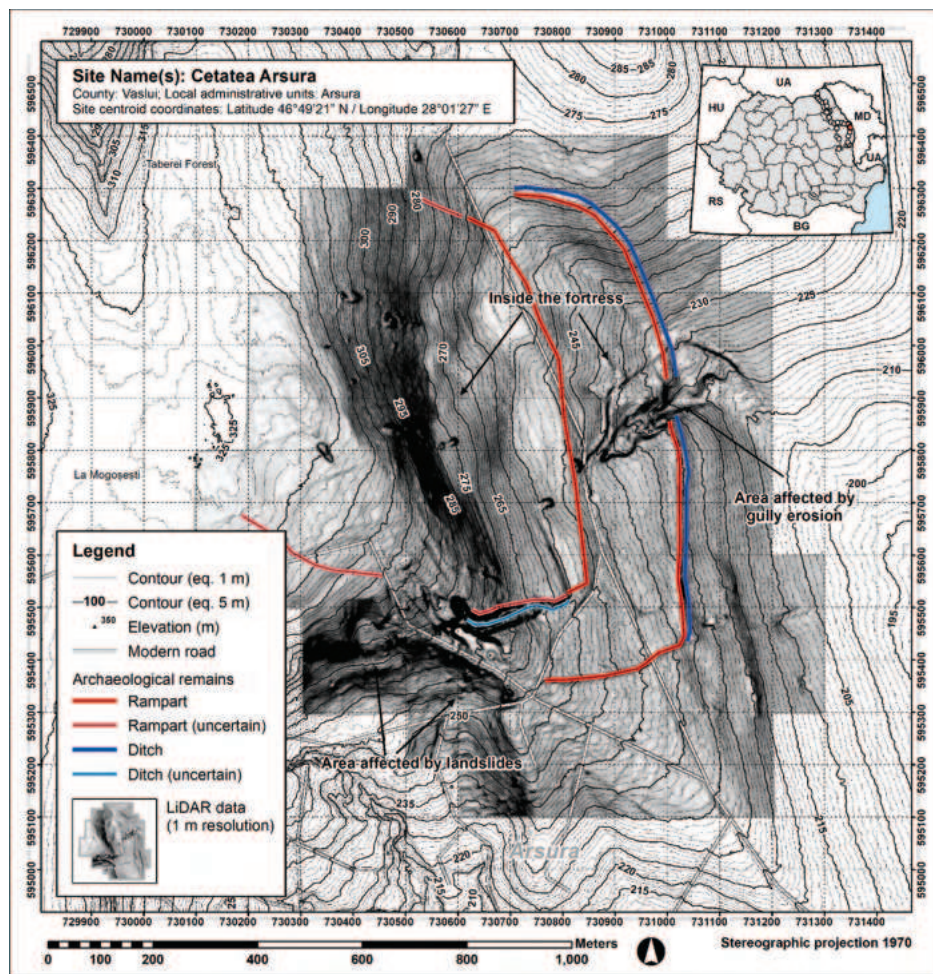


Figure 7. Arsura-Cetățuia Mogoșești hillfort. Interpretation map.

E. Bibliography:

Chirița 1893, p. 30; Teodor 1973, p. 53–60; RAJ Vaslui 1980, p. 51; Teodor 1994, p. 121; Zancu 1998, p. 117; Turcu 2002, pp. 17–18; Arnăuț 2003, p. 184; Măndescu 2010, Cat. p. 16; Berzovan 2019, p. 53; Berzovan 2019a, p. 86; Florescu 2022, p. 41–42.

III.1.3. Bârlălești-Cetățuia Foișor (Epureni Commune, Vaslui County)

A. Bârlălești-Cetățuia Foișor.

B. Field survey by N. Zaharia and Gh. Coman in 1957; Field surveys by Gh. Coman (1960–1980); Field survey by M. Oancă and M. Mamalaucă in 2013; Field survey by M. Oancă, M. Mamalaucă and A. Berzovan in 2020.



Figure 8. Bârlălești-Cetățuia Foișor hillfort. 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the Moldavian Plateau, more precisely in the southern area of the Fălciului Hills, at the contact with the Elan – Horincea Depression. Despite the low altitudes, the degree of fragmentation of the relief is higher and the level differences are pronounced. The site occupies the western slope of a ridge detached to the north from the Ciomaga massif, at an altitude of approx. 186 meters, dominating with approx. 50–60 m the lower surrounding areas. The area of visibility is, however, quite wide, especially to the north; to the south, one can see the area of the Murgeni-Cetățuia Ciomaga hillfort. **C.1.a.** Currently, the terrain is covered with a young forest plantation; **C.1.b.** The state of preservation is precarious, the site having been affected by numerous modern interventions.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 46° 12' 41" N, 27° 55' 08" E.

C.4. Around 183–186 m.

C.5. Around 50–60 m.

D. Description

D.1. Hill-slope fort (vestigial); single enclosure.

D.2. 5th–3rd centuries BC. **D.2.a.** Eneolithic (Cucuteni Culture); Middle Ages

D.3. Rampart with ditch.

D.4. Around 1.8 ha.

D.5. Description of the archaeological situation

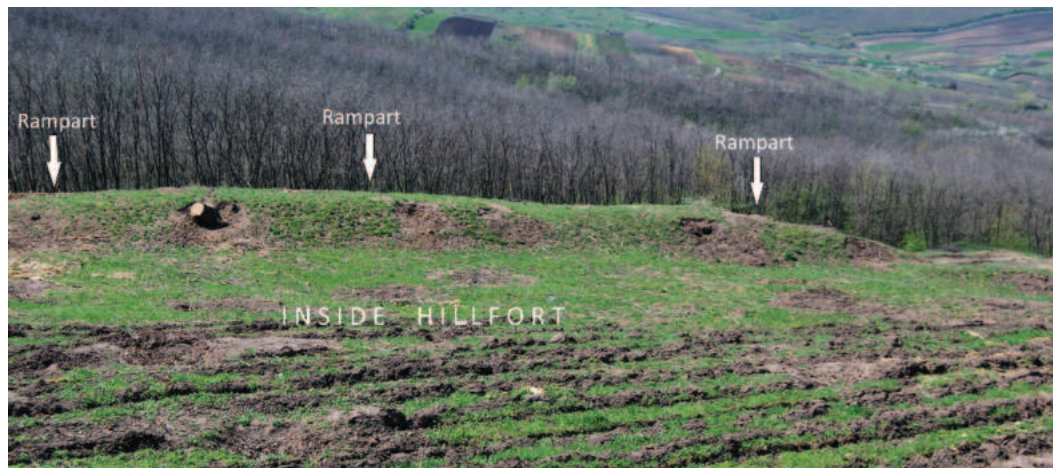


Figure 9. Bârlălești-Cetățuia Foișor. Photo from inside the hillfort in 2013 (M. Oancă).

Although many discoveries are known from the specialized literature in the area of Bârlălești village¹⁹¹, their precise location is often difficult to pinpoint, as the entire area has intense traces of habitation from various historical and prehistoric periods. It looks as if that the entire area of hills south of the village is a single large archeological site, with a very high density of ceramic vessels remains and other categories of artifacts. Perhaps this is also the source of some confusion in the literature related to the location and names of some particular archaeological sites.

N. Zaharia, M. Petrescu-Dâmbovița and E. Zaharia talk about the existence of a point called *Cetățuia Foișor*, located on the northwestern slope of Ciomaga Hill, where material from phase A of the Cucuteni Culture was discovered, pieces dated in Bronze Age, possible Paleolithic pieces, remains of vessels from the Late Iron Age, spindles, beads, metal objects, Roman-Byzantine brooch, earrings, belt appliqués, “three-edged” arrowheads, fragments of bronze sheet and iron tube, to which are added discoveries specific to the “*period of developed feudalism*”¹⁹².

During field researches carried out by M. Oancă and M. Mamalaucă, in 2013, the traces of a hillfort were identified on the north-western slopes of Ciomaga Hill, which could correspond to *Cetățuia Foișor* archaeological site. The area of visibility is quite wide, especially to the north; to the south, one can see the area of Murgeni-Cetățuia Ciomaga hillfort. The fortification elements (ditch and rampart) are strongly visible on the western and southern side; on the north side they seem more assumed, and to the east they are apparently absent. The fortifications can be seen well in the field and on some Google Earth satellite images, and less on the DEM. Unfortunately, as a result of deforestation in the early 20th century, agricultural work, then reforestation in the last years, various modern interventions and landslides, the degree of conservation of the objective is relatively modest.

The modest degree of conservation, along with the positioning in an area affected by older and new landslides raises certain questions. However, the significant presence of archaeological material inside the enclosure, as well as the existence of the closure on the south side and an opening (possible gate) leads us to believe that we are dealing with the remnant of a heavily affected hillfort and not a natural accident.

Field research conducted in 2013, and later in 2020, led to the recovery of a representative archaeological material, fragments of handmade ceramic vessels (remains of jars, with flattened ovoid buttons), dating widely in the 5th–3rd centuries BC.

E. Bibliography:

Zaharia *et alii* 1970, p. 339; RAJ Vaslui 1980, p. 127–130; Berzovan *et alii* 2020a.

¹⁹¹ Coman 1980, p. 127–130; Arnăut 2003, p. 188.

¹⁹² Zaharia *et alii* 1970, p. 339; According to Gh. Coman (RAJ Vaslui 1980, pp. 127–128) these pieces, including the Roman-Byzantine brooch, were discovered in the point Bârlălești – *Sturza*, also on Ciomaga Hill (see *below* in our repertory the discussion regarding Murgeni-Cetățuia Ciomaga); moreover, Gh. Coman also locates the “Foișor” point in Murgeni, on the eastern peak of Ciomaga Hill (RAJ Vaslui 1980, p. 191).



Figure 10. Bârlălești-Cetățuia Foișor. Photo from inside the hillfort in 2020, rampart visible on the left (M. Oancă and M. Mamalaucă).

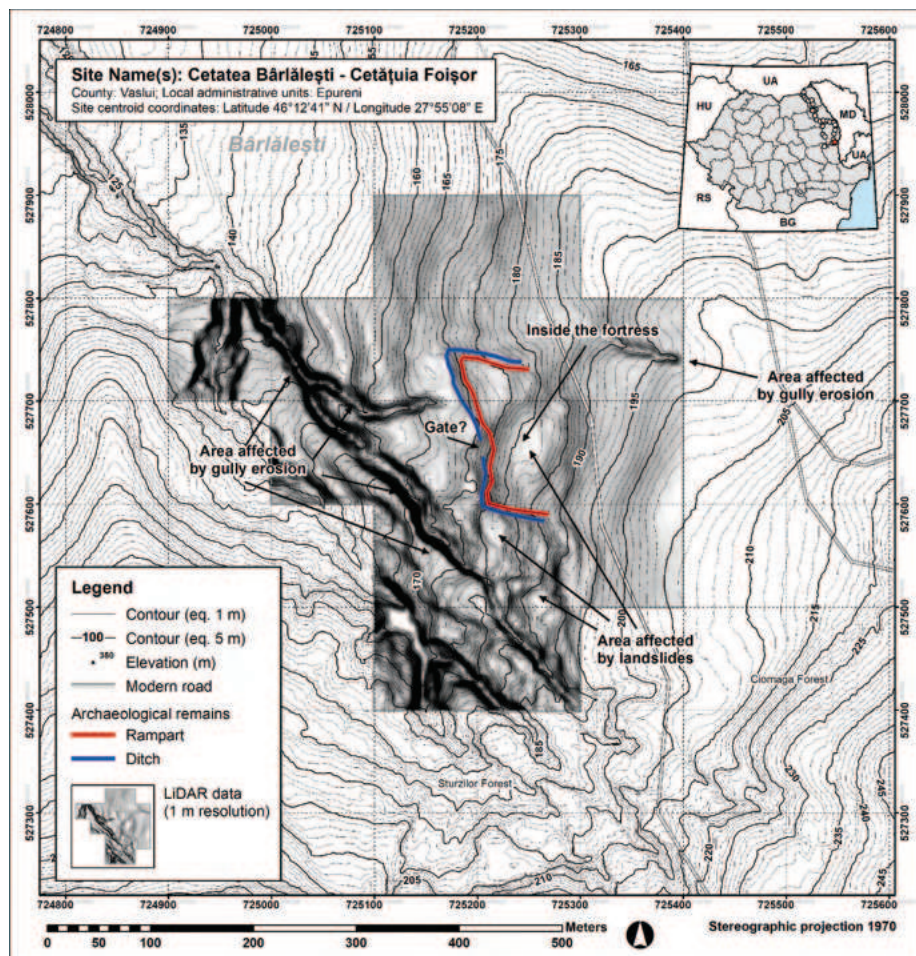


Figure 11. Bârlălești-Cetățuia Foișor hillfort. Interpretation Map.

D.4. 0.20 ha.

D.5. Description of the archaeological situation

The site was discovered as a result of field surveys conducted in the late 1970s and early 1980s. Greatly affected by landslides on all sides, the site produced many archaeological artefacts that enriched various local collections.

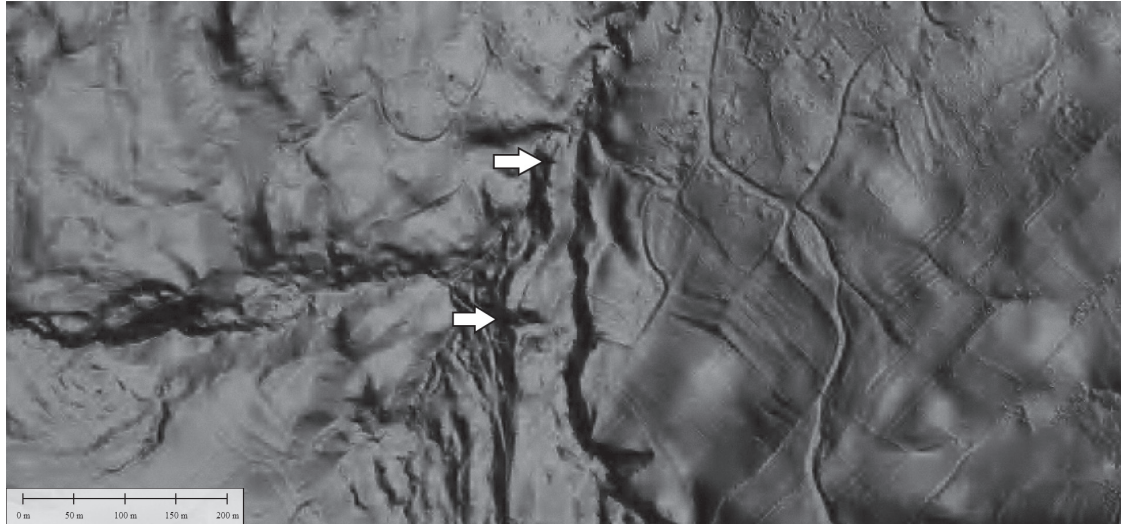


Figure 13. Bazga-Cetățuia hillfort on the DEM.

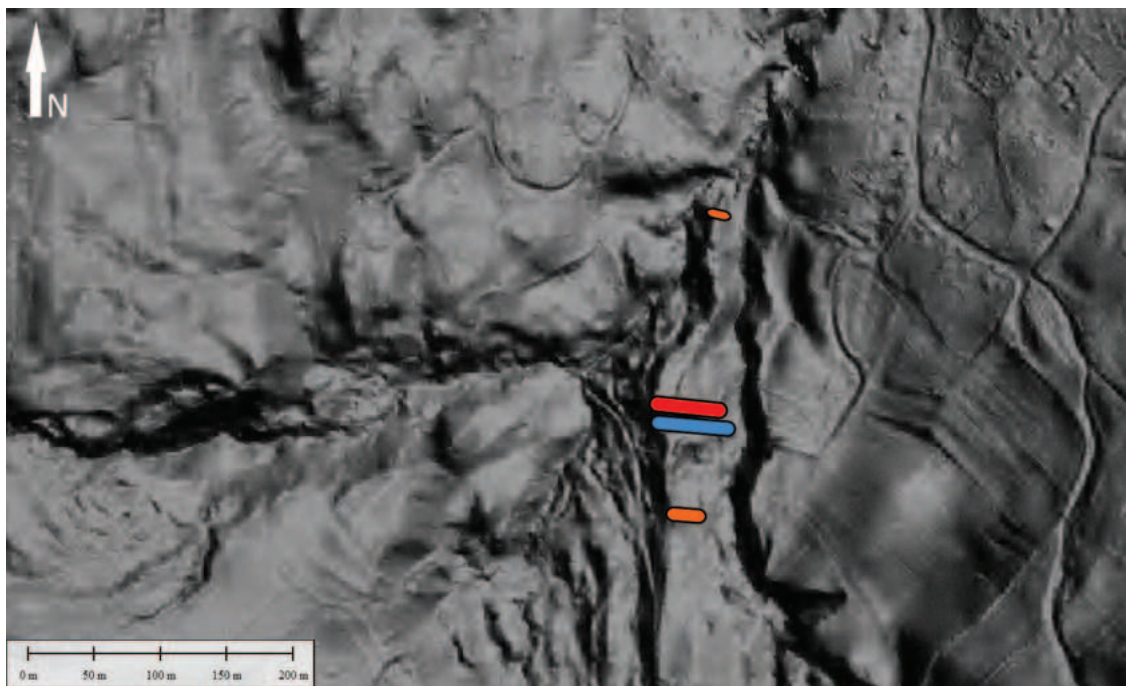


Figure 14. Bazga-Cetățuia hillfort. Interpretation map. With red: rampart; blue: ditch; orange: possible ramparts.

Between 2004 and 2014, archeological excavations were carried out by V. Merlan from the Huși Museum. Some of these campaigns were funded by doctor Romeo Dumitrescu, from the “Cucuteni pentru Mileniul III” foundation. In 2018, a site monograph was published. From a scientific point of view, the work is in many ways problematic, so the data presented must be approached cautiously. Limited observations can be made on the basis of published data.

Habitation in the site begins in the Eneolithic period (Cucuteni Culture), and there are a significant number of discoveries in this regard (pits, houses, relevant archaeological material). The



Figure 15. Bazga-Cetățuia hillfort. Aerial photo (A. Berzovan).



Figure 16. Bazga-Cetățuia hillfort. Aerial photo (A. Berzovan).

second stage of using the site is in the Bronze Age. The habitation from the 5th–3rd centuries BC it is quite intense (multiple dwellings are reported) and the defensive system seems to date from this timeframe. Greek *amphorae* are mentioned but no clear determinations were made. A number of bronze-made “Scythian type” arrowheads from a private collection are mentioned as coming from this site. The habitation traces for the 2nd–4th century AD period and from the Middle Ages are somewhat rarer.

Having a small surface and a rather low position, it is likely that the Bazga hillfort can be interpreted as a northern “outpost” for the much larger Moşna hillfort (see further), located a few kilometers towards south-east. Considering the fact that on the entire area between the Bazga and Moşna hillfort sporadic traces of habitation from the 5th–3rd centuries BC period can be found (sporadic potsherd, often associated with burned adobe) the entire area seemed to had been quite densely inhabited.

E. Bibliography:

RAJ Iaşi II 1985, p. 334; Turcu 2002, p. 142; Arnăuț 2003, p. 253; Merlan 2007; Merlan 2009; Merlan 2010; Merlan 2010a; Merlan 2013; Merlan 2018.

III.1.5. Brăhășești-Cetățuia (Galați County)

A. Brăhășești-Cetățuia / Cetate.

B. Test – diggings by Constantin Solomon in 1929; diggings by Mihalache Brudiu and Paul Păltânea in 1967; field surveys by Sebastian Matei, Dan Ștefan, Magdalena Ștefan in 2015–2016; field survey by A. Berzovan in 2021.



Figure 17. Brăhășești-Cetățuia hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From a geographical point of view, the site is located in the southern part of the Moldavian Plateau, more precisely at the southern limit of the Tutova Knolls [Colinele Tutovei], an area also known as the Zeletin Knolls. The landscape is dominated by wide valleys and low hills. The site occupies the southern end of the interfluvial ridge between Zeletin and Berheci rivers, at approx. 100 m altitude, dominating with approx. 30–40 m level difference the confluence area of the rivers mentioned above. The area of visibility is wide in all directions, except to the north. **C.1.a.** Currently, the terrains are used in agriculture; **C.1.b.** The state of preservation is precarious; the site is affected by agriculture.



Figure 18. Brăhășești-Cetățuia hillfort (Google Earth).

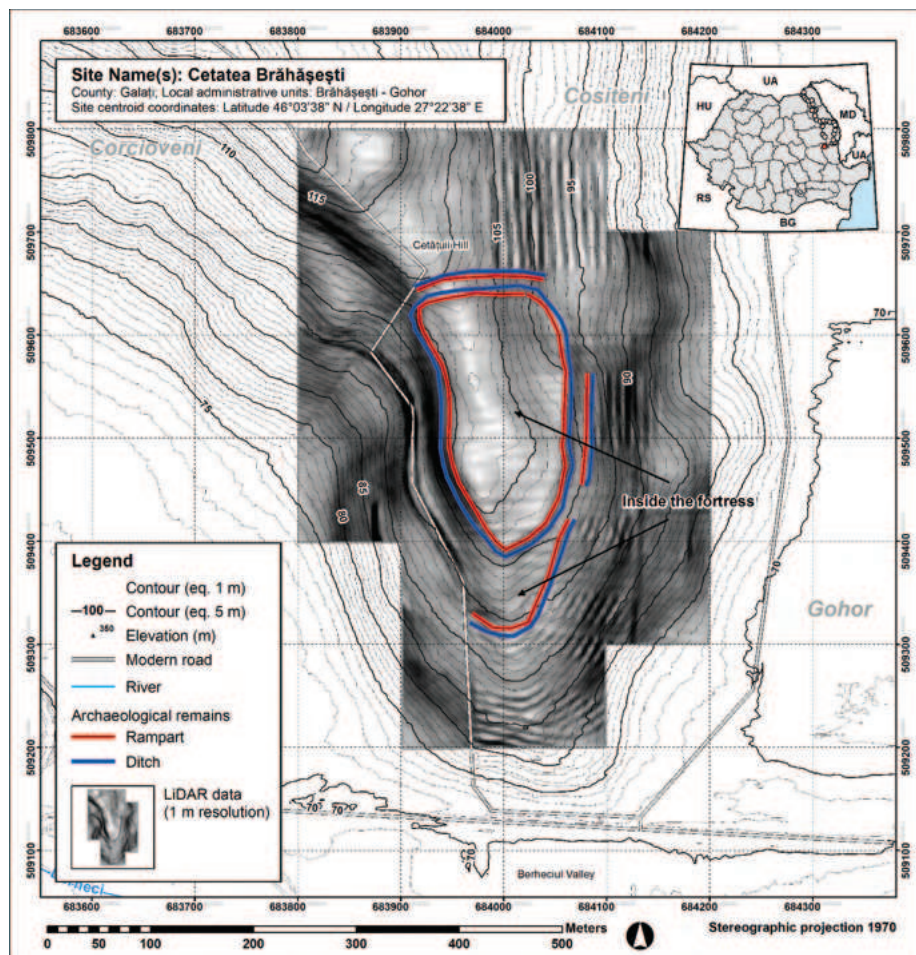


Figure 19. Brăhășești-Cetățuia hillfort. Interpretation map.

C.2. In the immediate vicinity are several springs and brooks.

C.3. $46^{\circ} 03' 38''$ N, $27^{\circ} 22' 38''$ E.

C.4. Approx. 100 m.

C.5. Around 30 m.

D. Description**D.1.** Enclosed plateau.**D.2.** 5th–3rd centuries BC. **D.2.a.** Middle Ages (?).**D.3.** Timber-box rampart (?) with ditches.**D.4.** Around 3.60–3.80 ha.**D.5. Description of the archaeological situation**

Located at the southern end of a promontory, the hillfort has an irregular shape, with a total length of approx. 350 m and a width of approx. 180–200 m. From a military point of view most accessible area is the northern one, but the other slopes are not very steep.

We noticed that the defensive elements are very poorly preserved, strongly affected by intensive agriculture as well as by the vineyards made during the last century. The traces of the defensive system are preserved in the form of a red strip of earth, that resulted from the burning of the clay solder of a palisade or wooden superstructures. On the north, east, and south side, in front of the main enclosure, another possible rampart and a ditch can be seen.

Archaeological excavations from 1929 and 1967, even if very limited both in scale as well as in purpose, brought to light important data about the defensive system and its structure. From inside the fortress were recovered potshards, both local as well as from the early period of the Late Iron Age.

E. Bibliography:

Solomon 1929; Brudiu, Păltănea 1972; Moscalu 1994, p. 206; Turcu 2002, p. 37–38; Arnăuț 2003, p. 192; Măndescu 2010, Cat., p. 16; Croitoru, Bodlev 2019; Florescu 2022, p. 46–47.

III.1.6. Bucecea / Cervicești-Pădurea Găvanului (Botoșani County)

A. Bucecea / Cervicești-Pădurea Găvanului; the point is located exactly on the border between the territory of the town Bucecea and the territory of the Cervicești village (from Mihai Eminescu commune).

B. Field survey by A. Berzovan, A. Kovacs, A. Nechifor in 2019.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located at the western edge of the Suceava Plateau, more precisely in the so-called Siret Peak that delimits to the east the valley of the same name, in the microzone known as Bucecea Pass. This is a passage between the Siret Corridor and the Jijia Plain used at least since Medieval period by shepherd coming from the Carpathians. The relief is characterized by the existence of wide structural plateaus, with the appearance of low hills (maximum altitude of about 300–350 m), bordered by wide and shallow valleys. The hillfort occupies a high plateau, at an altitude of 350 meters, dominating with approx. 150–200 meters in relative height the lower surrounding areas. It offers a good visibility both towards the Sitna Valley and to the south, up to the area of the Stâncești hillfort. From an administrative point of view, the eastern half of the hillforts is located in the territory of Bucecea, and the western half, in the territory of Cervicești, a village in the commune of Mihai Eminescu. **C.1.a.:** At the date of the last check (2019) the area was completely covered by forest. **C.1.b.:** The state of preservation is relatively good; some areas of the rampart and ditch were slightly affected by modern interventions (logging).

C.2. Nearby are located a number of springs that could have been used in ancient times.

C.3. 47° 47' 03" N, 26° 29' 16" E.

C.5. Around 350 m

C.6. 150–200 m.

D. Description:

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd century BC; **D.2.a.** Eneolithic (Cucuteni Culture).

D.3. Rampart with ditch.

D.4. Around 0.9–1 ha.

D.5. Description of the archaeological situation

Before our field survey (2019), there was no data in the specialized literature regarding this hillfort. On the southern side it is defended by a ditch with a total length of approx. 105–110 m, having an opening between 5–6 meters and a current depth between 1.5–2 m. The associated rampart, located immediately behind the ditch, is strongly flattened, difficult to see; only in the western sector it can be observed better and here it barely reaches the height of 1 m. Here is also located the entrance gate, used by the forest road.

Approximately 150 m north of these fortification elements, the plateau narrows a lot, turning into a hilly peak. It was in turn closed by a defense ditch (and possibly a rampart) with a depth of approx. 2 m and a width of approx. 10 m. The enclosed area is approx. 0.9–1 ha.

Even admitting the possibility that part of the plateau was destroyed as a result of landslides, the total surface of the hillfort could not have been much larger. Our field research inside the fortress was hampered by the existence of a thick carpet of leaves. However, from the western sector, from the slope area, we were able to recover some small hand-worked ceramic fragments and small fragments of burnt adobe. In one area we noticed the existence of significant quantities of burnt adobe, in some places even slag, with imprints of twigs, from a surface dwelling. From this area we recovered ceramic fragments worked by hand and on the wheel and a fragment of a fragmentary iron object, impossible to determine.

D.6. Observations. Related tumular necropolis

Our field research confirmed the existence near the hillfort of three distinct groups of mounds. We will briefly describe them in the following. The first group, which we have named *Tumular necropolis 1*, consists of six mounds, four of which are better preserved and two are strongly flattened. At this point it is located, in the Archaeological Repertory of Botoșani County, the so-called “Cervicești Mound”¹⁹⁴.

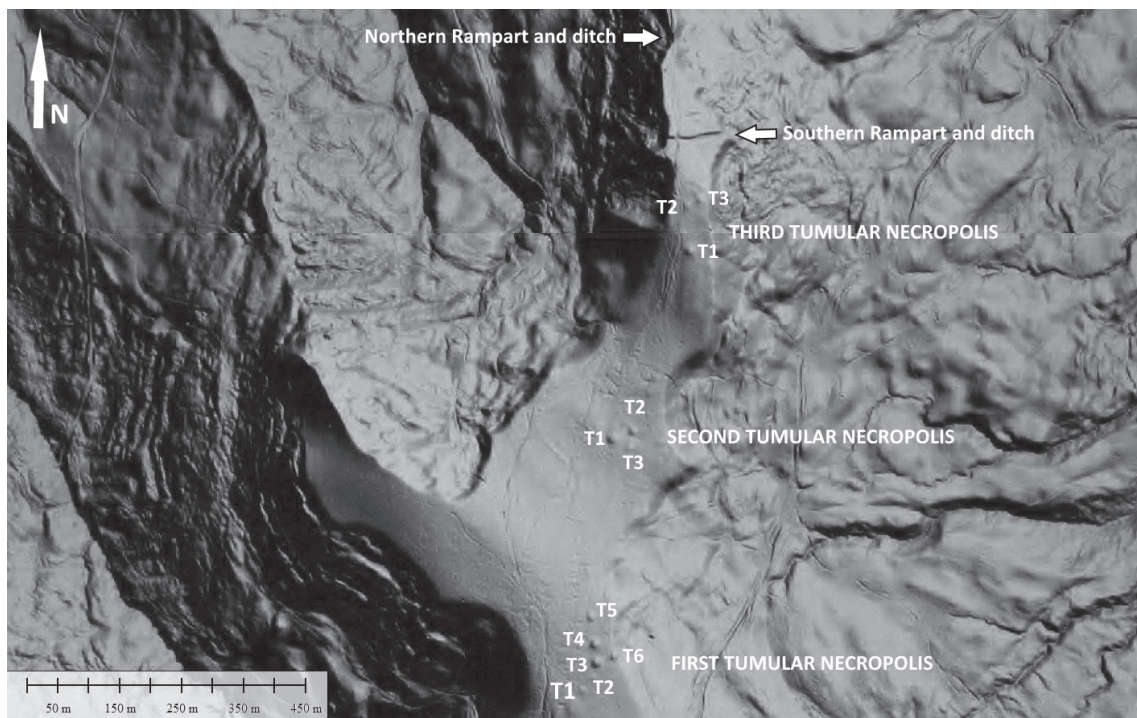


Figure 20. The hillfort from Bucecea / Cervicești-Pădurea Găvanului and tumular necropolis (LiDAR scans)

¹⁹⁴ RAJ Botoșani 2016, p. 292–293.

- T 1. Flattened. Diameter of approx. 12 m, kept height of approx. 0.5–1 m.
- T 2. Flattened. Diameter of approx. 12 m, kept height of approx. 0.5 m.
- T 3. Well preserved. Diameter of approx. 21–22 m, kept height of approx. 2 m.
- T 4. Well preserved. Diameter of approx. 20–21 m, kept height of approx. 2 m.
- T 5. Well preserved. Slightly elongated in shape, 14.5 m × 21 m, height of about 1.5 m.
- T 6. Well preserved. Diameter of approx. 15 m, height between approx. 0.5–1 m.

The second group, named *Tumular necropolis 2*, is located in the forest, at approx. 250 m to the north and consists of three mounds, arranged in a plan in a somewhat triangular shape.

- T 1. Well preserved. Diameter of approx. 22 m, height between 0.5–1 m.
- T 2. Well preserved. Diameter of approx. 20 m, height between 0.5–1 m.
- T 3. Flattened. Diameter of approx. 20 m, height of about 0.5 m.

The third group, named *Tumular necropolis 3*, is located about 270 northeast of the second and about 100 m south of the fortress rampart.

- T 1. Well preserved. Diameter of approx. 22 m, height between 1.5–2 m.
- T 2. Flattened, affected by modern works, crossed by the forest road; diameter of approx. 18 m, height between 0.5–1 m.
- T 3. Flattened. Diameter of about 16 m, height of approx. 0.5 m.

Even if the dimensions are not impressive, we consider that it is quite unlikely that it is about the border mounds raised in the Medieval Age. From our field experience, we noticed that, as a rule, border mounds have much smaller diameters, much less than 10 m and much more “tugged” shapes. Here, on the other hand, we are dealing with mounds built up of very large amounts of earth, or it is difficult to justify such a work effort to resolve simple boundary issues between villages. Rather, the boundaries seem to have been established by existing monuments on the ground, which functioned as landmarks, as we often see in medieval documents. In the light of these observations, we consider that, most likely, the archaeological sites investigated by us represent three tumular necropolises. Judging by their grouping in a small area in the immediate vicinity of the hillfort from Pădurea Găvanului, we consider that there is a possibility that at least one of the three groups of mounds could be the necropolis of the aristocracy of the fortress; even if they are older (eg. Bronze Age) the mounds could have been reused by the inhabitants of the Late Iron Age hillfort.

E. Bibliography:

Berzovan *et alii* 2019.

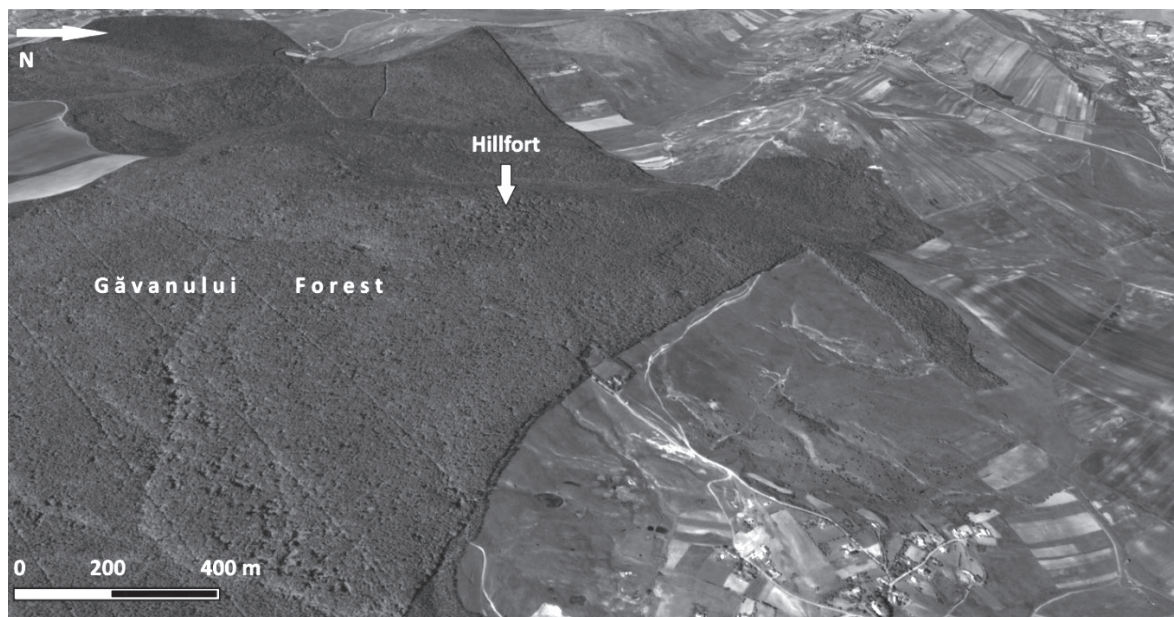


Figure 21. Bucecea / Cervicești-Pădurea Găvanului hillfort (Google Earth).

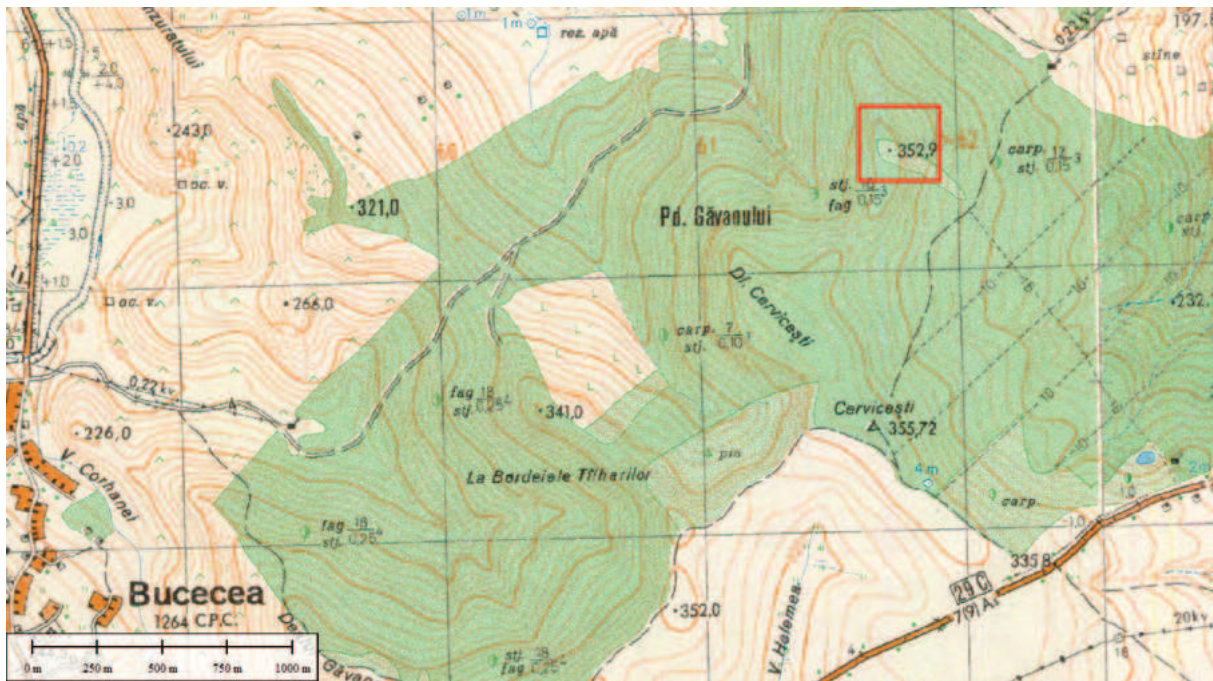


Figure 22. Bucecea – Cervicești-Pădurea Găvanului hillfort on 1:25 000 topographical map of Romania.

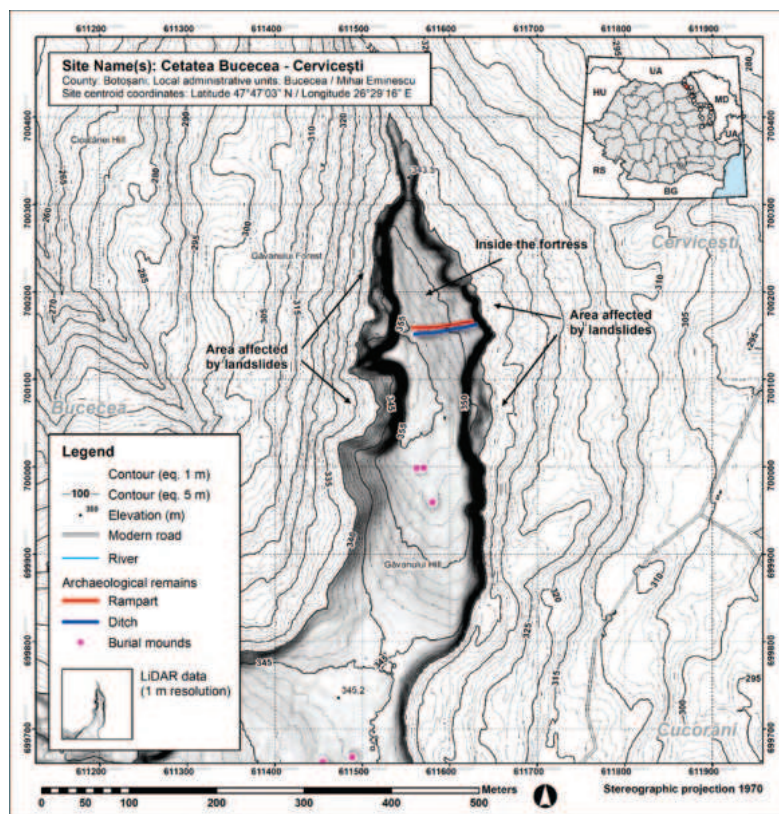


Figure 23. The hillfort from Bucecea / Cervicești-Pădurea Găvanului. Interpretation map.

III.1.7. Buhalnița-Cetate (Ceplenița commune, Iași County)

A. Buhalnița-Cetate / Cetățuia.

B. Field survey by N. Zaharia during the 1950s; field survey by A. Florescu and M. Florescu during the 1970s and 1980s; field survey by V. Chirica during the 1980s; field surveys by A. Berzovan 2016–2021.



Figure 24. Buhalnița-Cetate hillfort on 1:25 000 topographic map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the northern part of the Moldavian Plateau, more precisely on the eastern branch of the Dealul Mare massif, at its contact with the Jijia Plain. The site is located on the interfluve that separates the Călinău (north) and Buhalnița (south) streams. The viewshed is limited to the neighboring areas, but one can easily observe the A enclosure of the Cotnari-Cătălina hillfort, located approx. 1.5 km to the south. **C.1.a.** Currently, the fort is located under the modern village of Buhalnița; the terrain is mainly used in agriculture; **C.1.b.** The state of preservation is precarious; the fort is affected by numerous modern interventions and in the south by landslides.



Figure 25. Buhalnița-Cetate hillfort. Google Earth satellite image.

C.2. In the vicinity is the Buhalnița stream.

C.3. 47° 22' 35" N, 26° 54' 16" E.

C.4. Approx. 210 m.

C.5. Around 25–30 m.

D. Description

D.1. Hill-slope fort; single enclosure.

D.2. 5th–3rd centuries BC; **D.2.a.** Eneolithic (Cucuteni Culture); Bronze Age (Noua Culture); 2nd–3rd century AD period; Middle Ages.

D.3. Rampart with ditch.

D.4. 1.27 ha.

D.5. Description of the archaeological situation

The southern part is naturally defended by the course of the Buhalnița brook and by a ravine with a depth of approx. 25–30 m; the other sides are enclosed by a rampart and ditch arranged in a semicircular shape. The rampart has a preserved height of approximately 1.5–2 m and a width of around 6–8 m. The adjacent ditch is around 6 m width and about 1 m deep. The state of preservation is precarious.

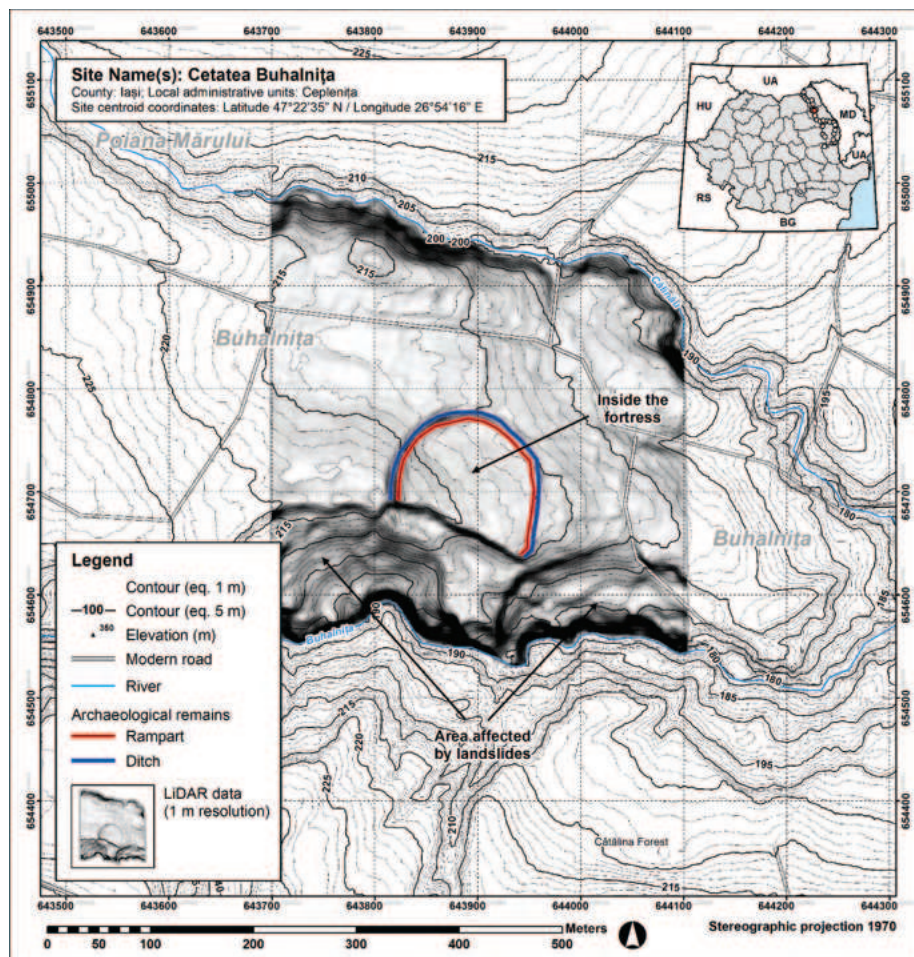


Figure 26. Buhalnița-Cetate hillfort. Interpretation map.

From inside the enclosure, numerous archaeological materials were recovered¹⁹⁵. A majority of them belong to the early Late Iron Age period, but also other periods were attested (Eneolithic,

¹⁹⁵ A significant quantity of materials was recovered by the late professor and amateur archaeologist Constantin Grigoraș. He also opened a rural ethnographic and archaeological museum in Buhalnița. After his death the museum remained in the custody of the relatives. We thank prof. Angelica Morărașu for offering us permission to enter the museum.

Bronze Age, 2nd–3rd century AD, Medieval Period). Since the fort is not attested in the historical medieval sources, and in other periods from which materials were found forts are uncommon, a dating in the early Late Iron Age is most probable. It seems that this hillfort, together with those of Cotnari-Cătălina, Scobinți – Basaraba, Scobinți-Dealul lui Vodă, Scobinți-Grădiștea and Todirești-Dealul Șanțurilor formed a coherent agglomeration during the 5th–3rd century in the area of the Dealul Mare massif.

E. Bibliography:

Zaharia *et alii* 1970, p. 173; Florescu 1971, p. 104; RAJ Iași I 1984, p. 72; Teodor 1999, p. 129; Turcu 2002, p. 42; Arnăuț 2003, p. 193–194; Berzovan 2017, p. 66–67.

III.1.8. Bunești-Dealul Bobului (Bunești – Averești commune, Vaslui County)

A. Bunești-Dealul Bobului / Cetate.

B. Field survey by V. V. Bazarciuc during the 1970s; archaeological excavations by V. V. Bazarciuc between 1978–2000; field surveys by A. Berzovan 2017–2021.

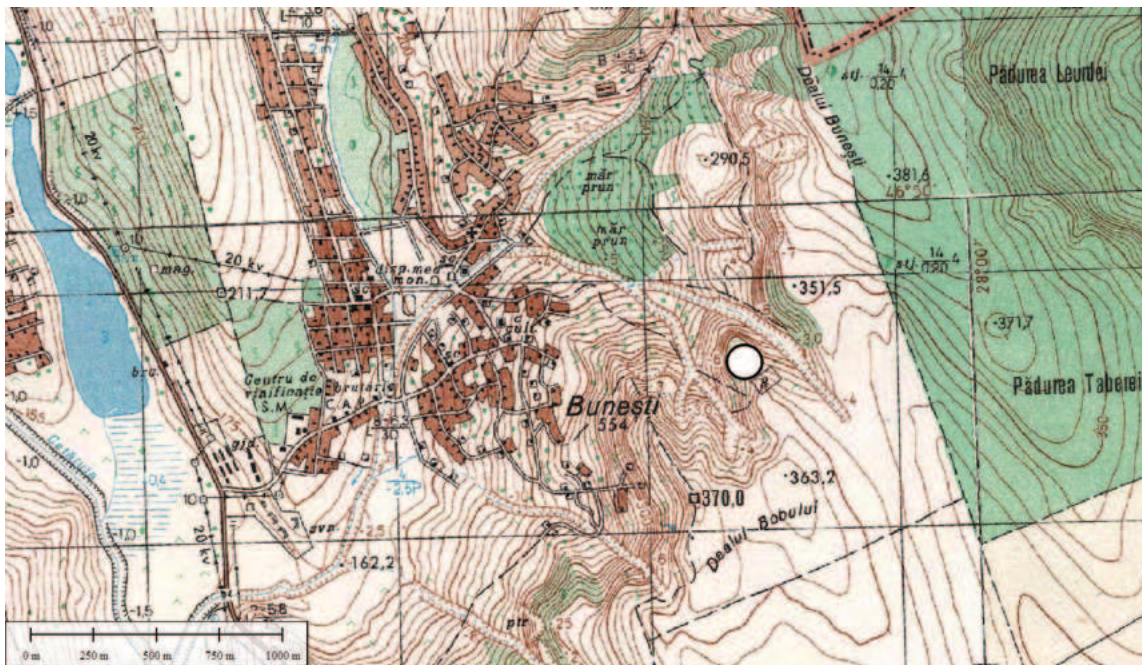


Figure 27. Bunești-Dealul Bobului hillfort on 1:25 000 topographic map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the area of the Central Moldavian Plateau, more precisely in its southern sector, on the western branch of the interfluvium that separates the Crasna river basin (tributary of Bârlad) from the Prut. The landscape is hilly, with high plateaus delimited by often narrow valleys. The site occupies a promontory of a large plateau, bounded by two streams with temporary flow, bordered to the northwest, southwest and northeast by steep slopes. The only easily accessible route from a military point of view is the one from the south-east, from the plateau, where the defensive system of the hillfort (rampart and ditch) appears most prominent. Another possible access route – visible on the DEM (see *below* the interpretation map) is on the western side, but it is rather narrow. The absolute altitude oscillates between 350–330 m, the point dominating with approx. 170–180 m difference in level the surrounding areas lower. The visibility is wide in all directions, except to the east and southeast where it is blocked by higher elevations.

C.1.a. Currently, the terrain is used as a pasture; **C.1.b.** The state of preservation is precarious; the old excavations had not been completely covered, leading to a steady degradation of the site.

C.2. In the vicinity there are located a number of streams and brooks.

C.3. 46° 49' 38" N, 27° 59' 13" E.

C.4. Approx. 350–330 m.

C.5. Around 170–180 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 4th–3rd centuries BC; **D.2.a.** Eneolithic (Cucuteni Culture); Bronze Age (Noua Culture).

D.3. Rampart with ditch.

D.4. 2.71 ha.

D.5. Description of the archaeological situation

The fortress is approximately square in shape with rounded corners, having a length of approx. 210 m and a width of approx. 130 m. It was (apparently) defended on all sides, but the defensive elements are much better preserved on the south-eastern side: here, the rampart is quite large, reaching about 25 m wide at base and current heights of about 9 m, doubled by a massive ditch, while on the northeast side, the height of the rampart is approx. 4–5 m.

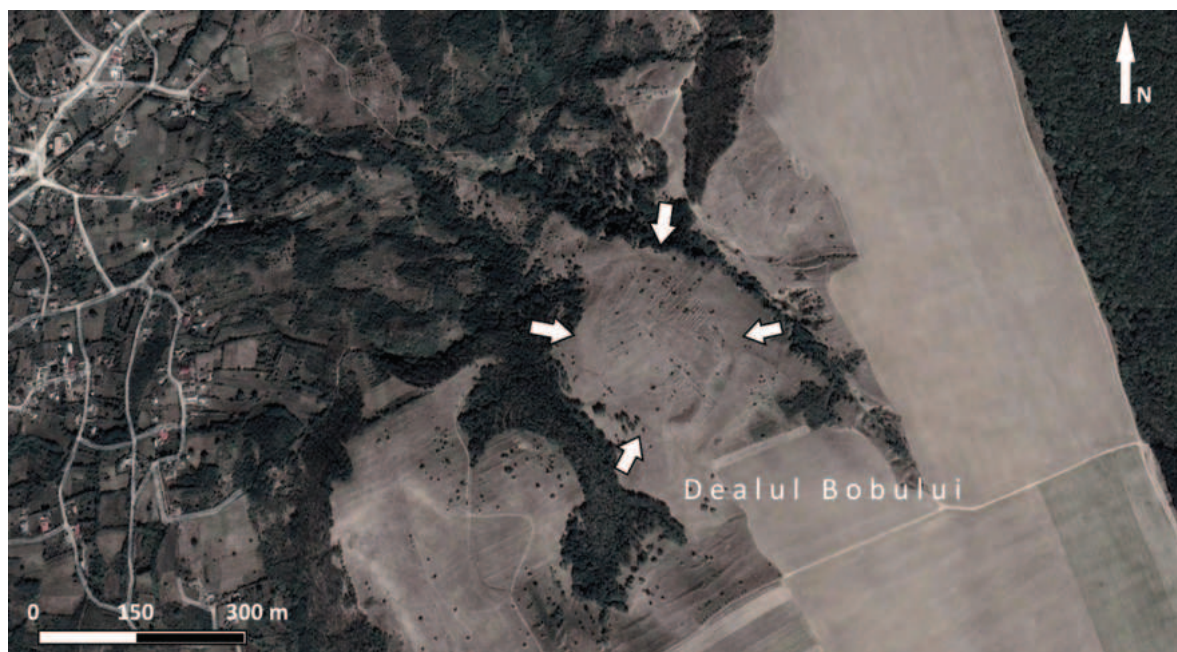


Figure 28. Bunești-Dealul Bobului hillfort. Google Earth map.

With regard to the total area of the fortress, several figures were proposed in the literature, 10–12 ha¹⁹⁶, 6 ha¹⁹⁷, according to other authors only 5 ha¹⁹⁸. In fact, the area enclosed by the earth ramparts measured by us on the DEM is much smaller than any of the mentioned data, of only 2.71 ha.

The hillfort had long-term archaeological excavations carried out by V. V. Bazarciuc. A total number of 127 archaeological trenches were made. These were of variable lengths, between 30 m and 280 m (the so-called magisterial trench). The width of the trenches was usually 2 m; when dwellings were identified, adjacent cassettes were opened. As an estimation, the total researched area amounts to around 50–60% of the entire enclosed area.

Regarding the stratigraphy, a single layer of habitation from the Late Iron Age is mentioned, with a thickness of around 20–25 cm; in certain areas of the site, Eneolithic as well as Bronze Age layers of habitations are mentioned.

¹⁹⁶ Zanoci 1998, p. 123.

¹⁹⁷ Bazarciu 1979, p. 130; Turcu 2002, p. 43; Haheu 2008, p. 67.

¹⁹⁸ Arnăut 2003, p. 195.



Figure 29. Bunești-Dealul Bobului hillfort. Aerial view of the enclosure from north-east (A. Berzovan).



Figure 30. Bunești-Dealul Bobului hillfort. Aerial view of the enclosure from south-east (A. Berzovan).

The often contradictory information presented in some of the published reports makes it difficult to reconstruct the archaeological situation. It seems that 30 rectangular dwellings were discovered – some of them quite large in size, 40–60 square meters, multiple tool deposits and hoards (fibula, bracelets, necklaces, coral and amber beads, etc.)¹⁹⁹, weapons, as well as three shattered burial tombs²⁰⁰, from which were recovered two bronze bracelets and a Latene-type bracelet²⁰¹.

Among the precious metal objects, the most important is the *golden diadem*. At the same time, a significant number of imports from the Mediterranean world, especially amphorae, have been discovered. The chronology of the hillfort covers the 4th to late 3rd centuries BC.

The richness of the material saved during the excavations seems to suggest either a hurried abandonment of the fortress, or a destruction of it as a result of a siege, the locals having no time to save their wealth. Otherwise it can hardly be explained the abundance of the discovered inventory, especially precious metal. We ask ourselves whether some of the so-called “shattered inhumation graves” that are reported could be the remnants of some individuals killed during or as a result of a siege²⁰². Of course, such hypothesis would need to be confirmed by anthropological analysis.

In any case the hillfort Bunești occupies a prominent position among similar contemporary monuments, an economic, political and military center of a tribal faction, probably the residence of a king (*basileus*)²⁰³.

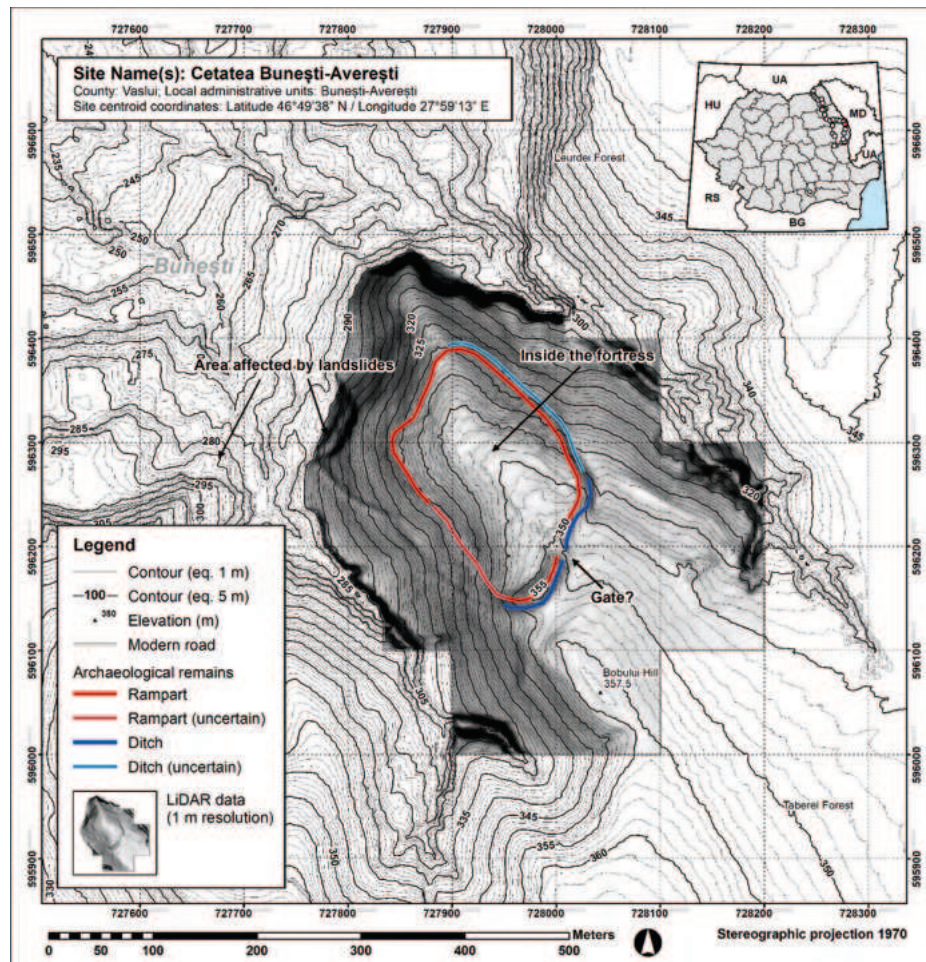


Figure 31. Bunești-Dealul Bobului hillfort. Interpretation map.

¹⁹⁹ For a detailed discussion on the hoards and deposits, see *Chapter IX* of our work.

²⁰⁰ Babeș 1994, p. 224–225.

²⁰¹ Bazarciuc 1986, p. 99.

²⁰² One of it could represent a foundation sacrifice, see the discussion in *Chapter V*.

²⁰³ Babeș 1994, p. 225.

E. Bibliography:

Bazarciuc 1979, p. 33–36; Bazarciuc 1980, p. 61–80; Bazarciuc 1980a, p. 164–176; Bazarciuc 1981, p. 563–570; Bazarciuc 1983, p. 249–273; Bazarciuc 1983a, p. 211–217; Bazarciuc 1984, p. 169–182; Bazarciuc 1984a, p. 6–8; Bazarciuc 1986, p. 89–99; Bazarciuc 1987, p. 33–39; Bazarciuc 1998, pp. 29–41; Babeş 1994, p. 224–225; Zanoci 1998, p. 123; Turcu 2002, p. 42–45; Arnăut 2003, p. 195; Haheu 2008, p. 67; Măndescu 2010, Cat., p. 33–38; Berzovan 2019, p. 52–53; Berzovan 2019a, p. 85–86.

III.1.9. Căndeşti-Coasta Nacului (Dumbrăveni commune, Vrancea County)

A. Căndeşti-Coasta Nacului

B. Archaeological excavations by M. Florescu and A. Florescu between 1965–1985; Field survey by A. Berzovan, A. Nicodei, A.-E. Apostu in 2021.



Figure 32. Căndeşti-Coasta Nacului hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. Geographically, the site is located at the contact between the Vrancea Subcarpathians and the Siret Plain area. In this region, between the easternmost heights of the Subcarpathians and the steppe plain, lays a plateau with a width of approx. 5–6 km, slightly sloping from west to east, fragmented by deep valleys. The site occupies a series of spurs detached to the north from this plateau, that bordered on the north by the Râmna brook and on the east by the so-called Valea Seacă, being fragmented in their turn by a series of ravines and maybe old anthropic interventions. The altitudes are low: the objective is at an elevation between approx. 150–170 m, dominating with approx. 40–50 m difference in level the surrounding areas lower. The area of visibility is quite wide, especially towards the north and northeast. C.1.a. Currently, the terrain is covered pastures, and the southern part by the houses of the Căndeşti village; C.1.b. The state of preservation is good.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 45° 33' 10" N, 27° 04' 30" E.

C.4. Approx. 150–170 m.

C.5. Around 40–50 m.

D. Description

D.1. Unclear.

D.2. 5th–3rd centuries BC. D.2.a. Bronze Age (Monteoru and Noua Cultures); Early Iron Age; Late Iron Age (1st century BC – 1st century AD).



Figure 33. Căndești-Coasta Nacului hillfort. Google Earth satellite image.



Figure 34. Aerial photo of Căndești-Coasta Nacului hillfort. Sectors no. III and IV. Old archaeological trench is visible (aerial photo by A. Berzovan).

D.3. Rampart with ditch (?).

D.4. Unclear.

D.5. Description of the archaeological situation

Although extensive archaeological excavations were carried out in and around this site – which also led to the discovery of one of the largest necropolises of the Bronze Age Monteoru Culture – the results were not published, for reasons that remain unknown. In this context, we depend on the small amount published so far, that until future archeological research, must be taken with



Figure 35. Aerial photo of Cândești-Coasta Nacului hillfort. Sectors no. IV–I. Old archaeological trench is visible (aerial photo by A. Berzovan).

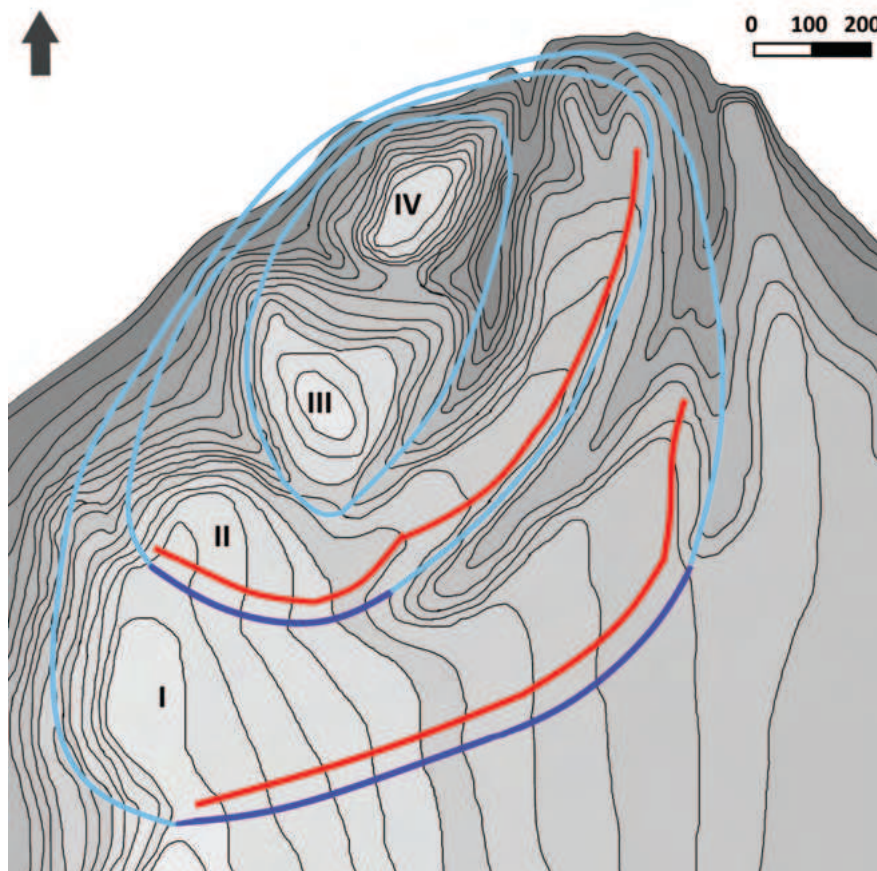


Figure 36. Cândești-Coasta Nacului hillfort. Map made by A. Florescu and M. Florescu, edited by A. Berzovan. With red: ramparts; blue: ditches (according to the authors, who considered the ravines to the east to be at least partially man-made).

maximum cautions. The authors of the excavation, M. Florescu and A. C. Florescu divided the site into four distinct sectors, numbered with Roman numerals.

According to the authors of the excavations, the site has known several distinct phases of evolution. Thus the largest enclosure (I on the sketch, see *below*) would have belonged to the Early Iron Age, being used until around the 5th century BC. Subsequently, the enclosed surface was significantly reduced, with the building of another rampart with ditch enclosing sector II; this second phase would have lasted throughout the 3rd–2nd centuries BC. In the last stage, the 2nd century BC – 1st century AD, the settlement would have been reduced only to the Nacu plateau (sector IV). The authors did not publish the stratigraphic section for the ramparts, and during our field surveys, we could not identify them: according to authors, however, the ramparts were (mostly) destroyed due to the extension of the village as well as agricultural works. Furthermore, the authors consider that the ravines are, partially, of anthropic origin, an assertion that we consider difficult to accept.

The archaeological materials that we consulted in the collections of the Iași Institute of Archaeology support the general chronology offered by the authors; however, without archaeological plans, the interpretations mentioned above have to be taken with many precautions. In any case, a verification digging is more than necessary.

E. Bibliography:

Florescu, Florescu 1983, p. 73–93; Turcu 2002, p. 55–56; Arnăuț 2003, p. 198.

III.1.10. Cetățuia-Cetățuia Strâmba (Puiești commune, Vaslui County)

A. Cetățuia-Cetățuia Strâmba / Cetățuia Puiești.

B. Field survey by T. Pamfil and V. Nicolau in 1913–1914; field survey by M. Oancă, M. Mamalaucă and A. Berzovan in 2020.

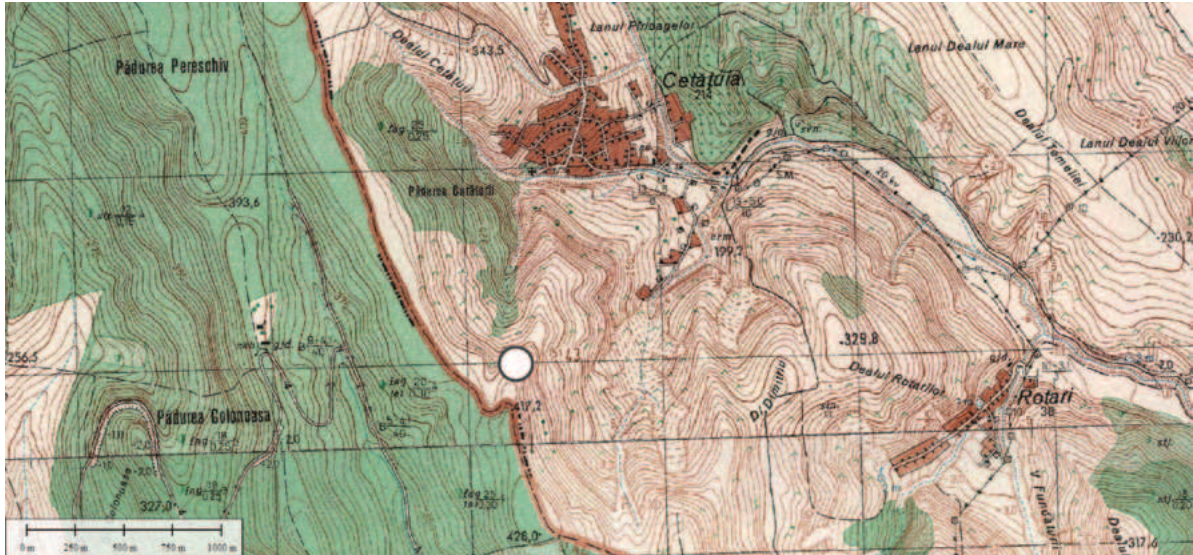


Figure 37. Cetățuia Strâmba hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the southern part of the Moldavian Plateau, more precisely in the Tutova Hills, on the interfluvium that delimits the basins of the Tutova (east) and Zeletin (east) rivers. It occupies a high, dominant plateau, at an altitude of approx. 400 m, dominating with approx. 250–300 m level difference lower surrounding areas. The visibility area is wide in all directions, especially to the north, east and south. C.1.a. Currently, the terrain is used in agriculture; C.1.b. The state of preservation is precarious, especially due to the intensive agriculture that mostly flattened the defensive system (rampart and ditch).

C.2. In the immediate vicinity are several springs.

C.3. 46° 25' 07" N, 27° 25' 50" E.

C.4. Approx. 400–404 m.

C.5. Around 250–300 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC. **D.2.a.** Eneolithic (Cucuteni Culture).

D.3. Rampart with ditch.

D.4. around 0.40 ha.

D.5. Description of the archaeological situation

The first field researches were carried out in 1913 by T. Pamfil and V. Nicolau. The results of the field research, with a series of conclusions and a preliminary plan of the fortifications were published in 1914 in the periodical Miron Costin²⁰⁴.

We are not aware of any subsequent field inspections at this point. In 2020, together with colleagues from the Vasile Pârvan County Museum from Bârlad, we conducted a series of field surveys in the area. The habitation traces from the early Late Iron Age is quite limited, the sporadic traces being concentrated only in the area of the fortifications, strongly flattened by plowing. The rampart and ditch currently appear only as simple color anomalies, barely recognizable on the ground and visible only from the air or satellite imagery. They seem to enclose an approximately circular enclosure, no larger than 0.40 ha. The hillfort from the 5th–3rd centuries BC overlaps a much larger Eneolithic settlement, with a very rich material.

It is interesting to note, to west and north-west of our objective, the presence of a large number of mounds that could have archaeological significance and could (theoretically) indicate an aristocratic necropolis connected to the Iron Age hillfort.

E. Bibliography:

Pamfil, Nicolau 1914, p. 3–8.



Figure 38. Cetățuia Strâmba hillfort on Google Earth satellite image.

²⁰⁴ Pamfil, Nicolau 1914, p. 3–8.

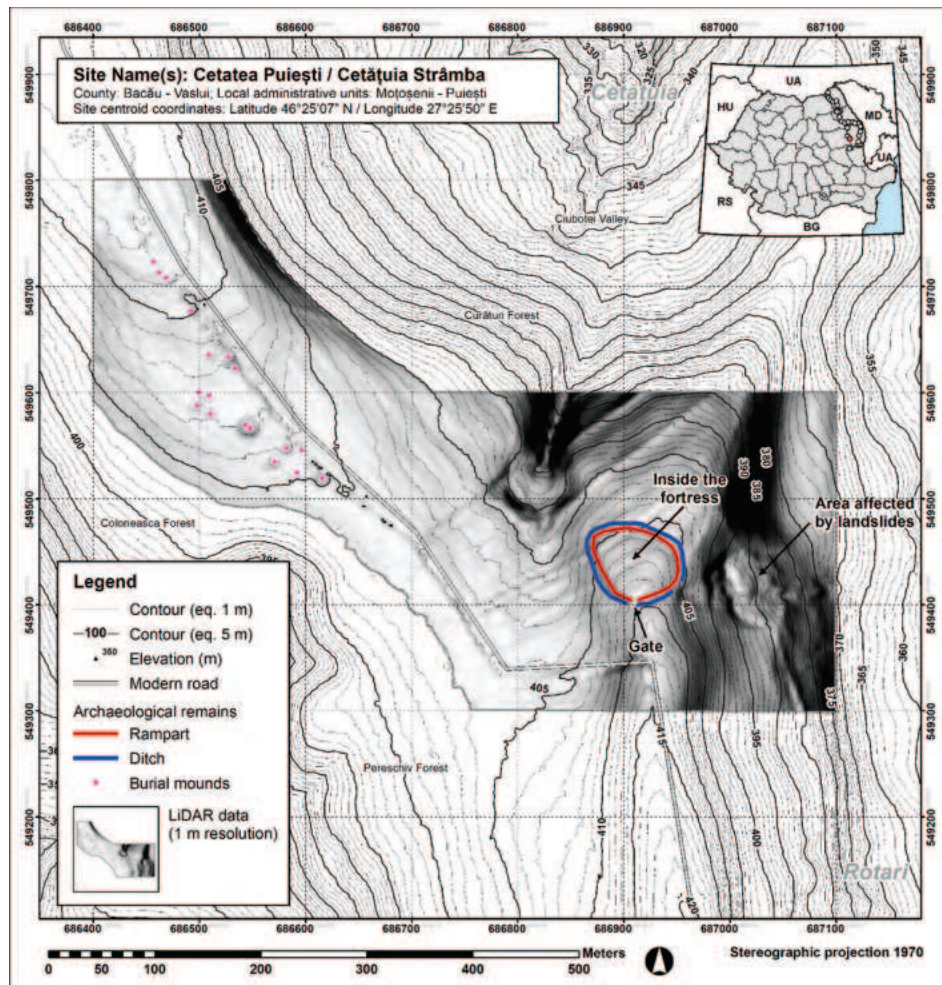


Figure 39. Cetățuia Strâmba hillfort. Interpretation map.

III.1.11. Cotnari-Cătălina (Iași County)

A. Cotnari-Cetatea Cătălina; Cătălina; Cătălina-Horodiște.

B. Survey by Gh. Asachi in 1854; diggings made by D. Butculescu in 1885; field survey by I. Gugiuman and N. Barbu in 1950; field survey by N. Zaharia in 1956; archaeological diggings by A. C. Florescu between 1965–1985; archaeological diggings by M. Florescu between 1992–1993; Survey and scan by Arheoinvest Platform between 2014–2015; Field surveys by A. Berzovan between 2016–2021 (with various collaborators).

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the northern part of the Moldavian Plateau, more precisely on the eastern branch of the Dealul Mare massif, at its contact with the lower area of the Jijia Plain, the latter characterized by a steppe biome. The first enclosure (A) occupies the upper plateau of Cătălina Hill, at an altitude of approx. 390 m. This plateau, which dominates with approx. 250 m level the lower surrounding areas, offers an excellent area of visibility in all directions. The second enclosure (B) occupies the southern slopes of the same hill and is, for the most part, under the current Horodiște village. The access way in the interior was probably the ridge that detaches from the plateau of Cătălina Hill to the SE, that has a rather gentle slope. Another access route could have been inside the second enclosure, perhaps following the current road. **C.1.a.** At the time of writing, enclosure A is covered with pasture; enclosure B is covered by pastures, vineyards, agricultural lands and the modern village Horodiște. **C.1.b.** The state of conservation is quite precarious. Enclosure A was severely damaged by the vandalization of the site museum designed by



Figure 40. Cotnari-Cătălina hillfort on 1:25 000 topographical map of Romania.

A. C. Florescu (during the 1990's) and the annual village holiday; enclosure B is located under the hearth of the current village of Horodiștea, being largely covered by various households.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 47° 21' 32" N, 26° 55' 16" E.

C.4. Approx. 390 m (highest area), approx. 260 m (lowest part).

C.5. Between 250–90 m.

D. Description

D.1. Hilltop fort (A) with hill-slope fort (B); two enclosures.

D.2. 5th–3rd centuries BC; D.2.a: Eneolithic (Cucuteni Culture); Bronze Age (Noua Culture).

D.3. *Pfostenschlitzmauer* (1st phase) and rampart with ditch (2nd phase) in Enclosure A.

D.4. Around 77 ha.

D.5. Description of the archaeological situation

D.5.1. Short history of research

Protected by imposing ramparts, guarding the entire micro-zone Hârlău – Cotnari, the fortress on Cătălina hill attracted the attention of the locals since ancient times. As we mentioned in the second chapter of this book, the first sketch of the fortifications was made by Gheorghe Asachi in 1854²⁰⁵, with remarkable accuracy for that time. The site sporadically came to the attention of antique collectors during the 19th century. Thus, there is discussion of the discovery between 1832 and 1835, of a statuette of Apollo in the “former vineyard of Statakiu”²⁰⁶, but since the artifact was lost, we will probably never know if it is an ancient artifact or, rather, a modern reproduction in antique style.

Dimitrie Butculescu's diggings, conducted in 1885, brought to light only prehistoric objects, probably related to the Cucuteni habitation (Eneolithic)²⁰⁷. However, the existence of fortification works on the Cătălina height was noted in Odobescu's *Questionnaire*, as well as in the manuscripts of Pamfil Polonic²⁰⁸. In 1950, the geographers Ion Gugiuman and Nicolae Barbu carried out a series

²⁰⁵ Asachi 1854. See also the discussion from this volume in *Chapter II*, dedicated to the historiography of the theme.

²⁰⁶ Zaharia *et alii* 1970, p. 182–183.

²⁰⁷ Zaharia *et alii* 1970, p. 183; RAJ Iași I, 1984, p. 96.

²⁰⁸ RAJ Iași I, 1984, p. 96.

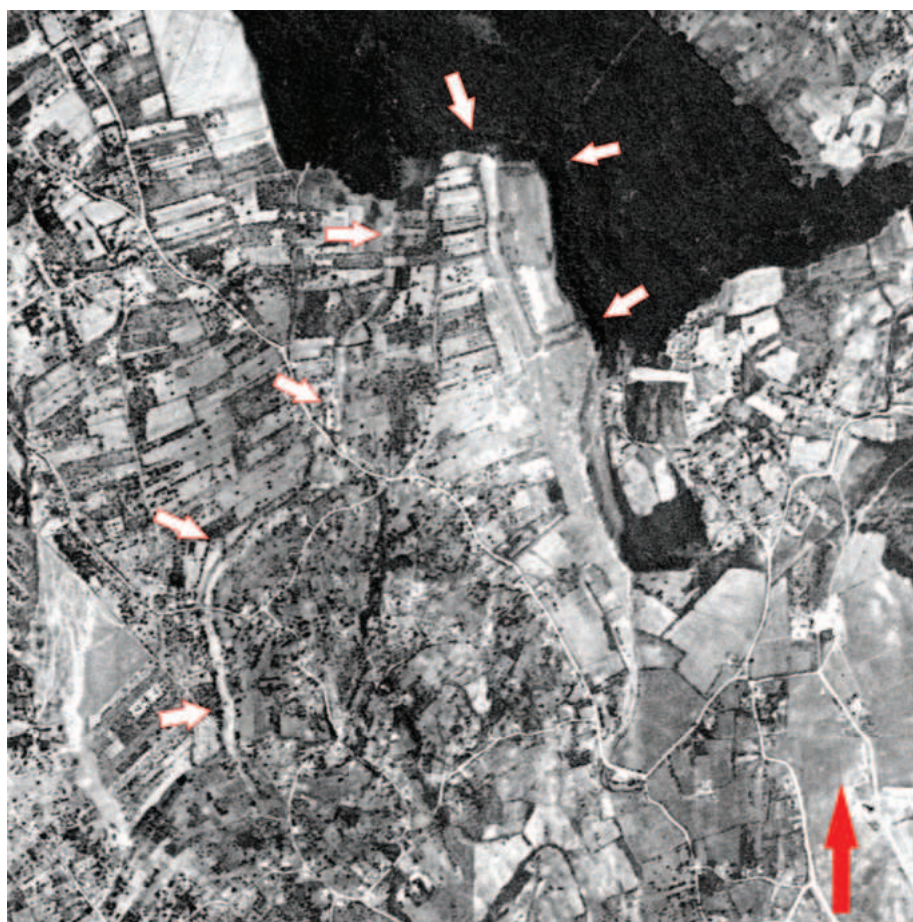


Figure 41. Cotnari-Cătălina hillfort. Corona satellite image made by US Air Force in 1968 (after <https://earthexplorer.usgs.gov>).

of surveys in the area of Cătălina hill²⁰⁹. Their observations were communicated to the archaeologists from Iași, and in 1956 Nicolae Zaharia conducted a field survey in the area. For N. Zaharia, what today we call *Enclosure A*, respectively *Enclosure B*, mostly covered by the Horodiștea village, represented two distinct fortifications, the same opinion was later taken over in the Archaeological Repertory of Iași County²¹⁰.

Archeological excavations took place between 1965 and 1985 and were conducted by A. C. Florescu in the first enclosure (A). Between 1992 and 1993, further diggings were conducted out by M. Florescu. A. C. Florescu divided his excavation into six research units, of variable extent, inside *Enclosure A*. The technique of long trenches was used, but also extensions in surface, depending on the archaeological situation. A. C. Florescu tried to understand the peculiarities of the defensive system but also the traces of habitation inside the enclosure, documenting a number of dwellings and pits of various sizes²¹¹. Unfortunately too little of this documentation was recovered²¹².

Of special interest in the research at Cătălina is the article published by A. S. Ștefan in 1990; the author, using aerial photography, has managed to reconstitute the plan of the hillfort, with both enclosures, for the first time after Gh. Asachi²¹³. During 2014–2015 during the PROSPECT project developed by the Arheoinvest Platform (Alexandru Ioan Cuza University in Iași), the *A Enclosure* benefited from a magnetometric survey; also, some aerial photos were made and a partial

²⁰⁹ Zaharia *et alii* 1970, p. 183.

²¹⁰ RAJ Iași I 1984, p. Berzovan 2017, p. 63.

²¹¹ Florescu 2022; See also Berzovan 2022a.

²¹² See Berzovan 2022a.

²¹³ Ștefan 1990, p. 45–49.

reconstruction based on LiDAR²¹⁴. Further discussion on the hillfort – from the point of view of the natural hazards that affected it (landslides) are found in the studies made during the LAHAMP project, led by members of the Geography Faculty of the same University²¹⁵.

Through our published studies from 2017 and 2018 we have attempted to assemble all the previously known data from the bibliography²¹⁶.

D.5.2. The plan of the hillfort

Enclosure A occupies the upper plateau of Cătălina Hill. It has a roughly rectangular shape and a total area of approx. 6,5 ha, being surrounded by a rampart on all sides: more visible on the VSV side and less on the ENE side, where the slope is quite steep; towards SE, the rampart is followed by a ditch. *Enclosure B* occupies the SW feet of Cătălina Hill. The constituent elements – the rampart and the outer ditch – are well visible on the top of Fundoi Hill and Cioban Hill, as well as in the Bozia Hill area. These ramparts and ditches pass through Horodiştea village, among the gardens and vineyards of the locals, often serving as boundary. The southern and eastern part of *Enclosure B* are difficult to pinpoint, due to various natural and anthropic interventions that affected the area²¹⁷. Even so, the total estimated area of *Enclosure B* is approx. 70.61 ha, which brings us to a total of approx. 77 ha.

The field surveys carried out by us in the western sector of *Enclosure B*, where Gh. Asachi mentioned the toponym “Poarta Taberei”, revealed the impressive dimensions of the defensive system in this area. The rampart, quite massive, reaches heights of approx. 5–6 meters, relevant values for the effort made by the builders who almost two and a half millennia ago built approx. 3300 linear meters of fortifications,

²¹⁴ See also <http://arheoinvest.uaic.ro/research/prospect/> (accessed on 1.09.2021). The reconstruction covers about $\frac{3}{4}$ of the entire surface of the hillfort, while the southern extremity of *Enclosure B* is missing.

²¹⁵ Niculiță 2020, p. 50–51 with the bibliography.

²¹⁶ Berzovan 2017, p. 62–70; Berzovan 2018a, p. 325–334.

²¹⁷ Some of the colleagues we had talked to are of the opinion that the visible depression in the ESE part is in fact a delimitation made during the communist-era vineyard works; however, it appears also on the plans reconstructed by A. S. Ștefan, and on the much older one made by Asachi, which is why we marked it on the interpretation map (with the necessary cautions). Regarding the closure in the southern area, south of the mounds, we may not speak of a rampart *per-se*, but the existence of an excarpment work (with a palisade?) in the area is quite obvious, that is why we have marked it on the interpretation map.

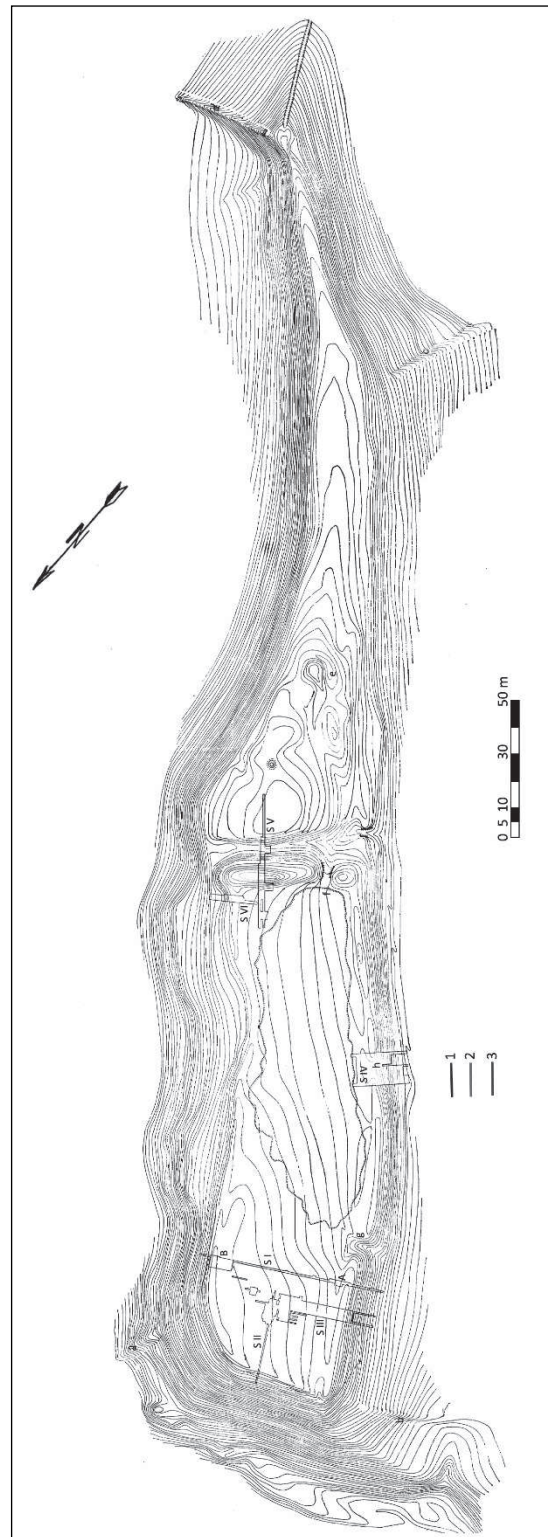


Figure 42. Cotnari-Cătălina hillfort. Plan of Enclosure A (after A. C. Florescu).



Figure 43. Cotnari-Cătălina hillfort. Aerial photography of Enclosure A from the east (A. Berzovan).



Figure 44. Cotnari-Cătălina hillfort. Aerial photography of Enclosure A, view from west (A. Berzovan).

displacing tens of thousands of cubic meters of earth, stone and wood²¹⁸. In the southern area of *Enclosure B* we notice two mounds, T 1 (the western one) with a diameter of approx. 42 m and T 2 (east) with a diameter of approx. 37 m, also reported in the Archaeological Repertory of Iași County. Their remote positioning in relation to the fortification elements – rampart and ditch – excludes in our opinion the idea that they would be defensive arrangements (towers). In any case, their presence should not be surprising; other sites, such as the fortress of Moșna (see in our *Repertoire*), also framed a massive mound inside. In the absence of archaeological excavations, the chronological and functional relationship between these mounds and the fortress cannot be specified exactly. But since the cultures and populations in the Eastern Carpathian space that succeeded the 5th–3rd century BC horizon usually did not build such monuments on such a scale, we can assume that the mounds could have been either older or contemporary with the construction. fortification. In this situation, their presence can no longer be considered accidental; they could have served as graves of the founders of the hillfort, of some heroic personalities or ancestors, representing perhaps a place of memory for the populations living here approx. 2400 years ago.

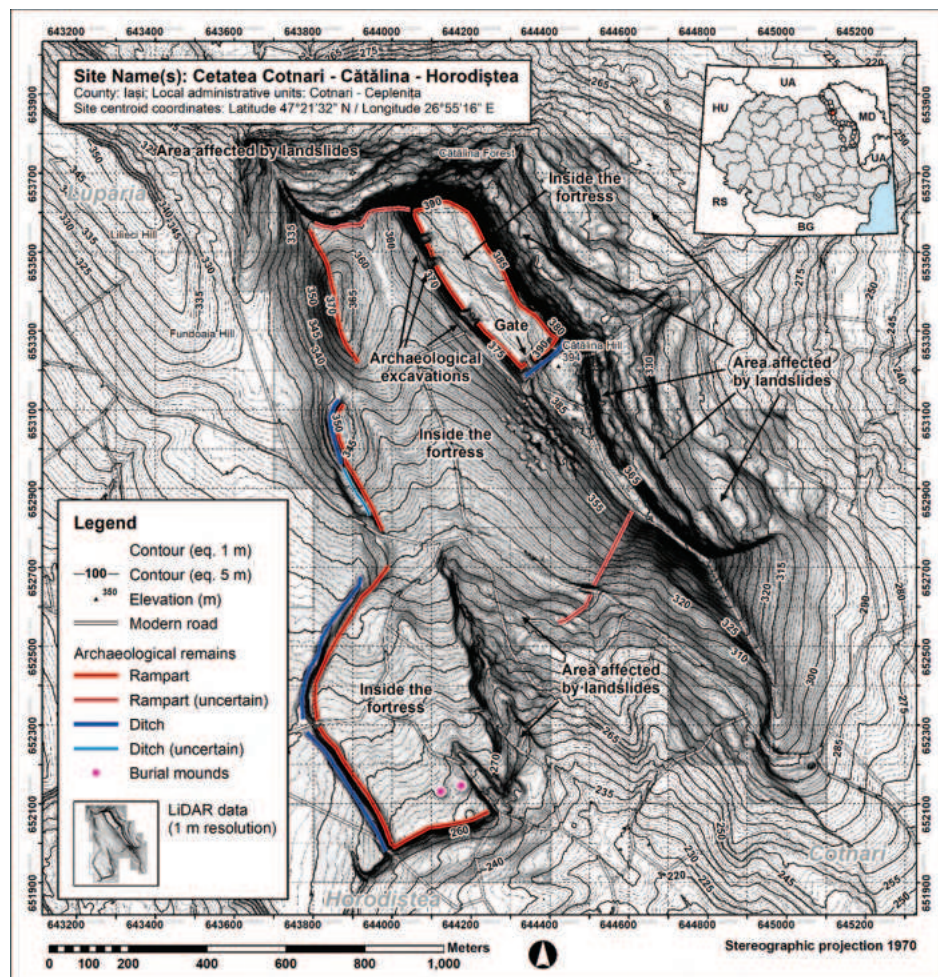


Figure 45. Cotnari-Cătălina hillfort. Interpretation map.

D.5.3. Chronology and evolution

Unfortunately, much of the documentation and related illustration has been lost, so we must rely only on the little information that came out of the plans and photographs that have been retrieved from the Iași Institute of Archaeology archive. As we have pointed out on another occasion, it is quite clear in our opinion that the fortifications of Enclosure A had two distinct phases: a first phase

²¹⁸ See Berzovan 2022a, p. 135–142.

with a stone wall of the *Pfostenschlitzmauer* type, and a second phase marked by the decommissioning of the wall and the construction of the dump rampart that is visible to this day (see discussions in *Chapter V*).

E. Bibliography:

Asachi 1854; Zaharia *et alii* 1970, p. 183; Florescu 1971, pp. 103–118; Florescu 1980, p. 11–18; Florescu 1980a, p. 4; RAJ Iași I, 1984, p. 96; Ștefan 1990, p. 45–49; Preda 1994, p. 365–366; Turcu 2002, p. 65–66; p. 89; Arnăuț 2003, p. 205; Măndescu 2010, Cat., p. 60; Berzovan 2017, p. 62–70; Berzovan 2018a, p. 325–334; Florescu 2022, *passim*; Berzovan 2022a, p. 135–142.

III.1.12. Cotu Copălău-Cetate (Botoșani County)

A. Cotu Copălău-Cetate / Poiana Jorovlea / Poiana Costăchel.

B. Field survey by A. Păunescu, P. Șadurschi and V. Chirica in 1973; archaeological diggings by P. Șadurschi, O. L. Șovan and M. Diaconescu in 1985, 1986, 1989, as well as between 2003–2004 by O. L. Șovan and M. Ignat; Field survey by A. Berzovan, A. Kovács and Al. Kovács between 2016–2021.

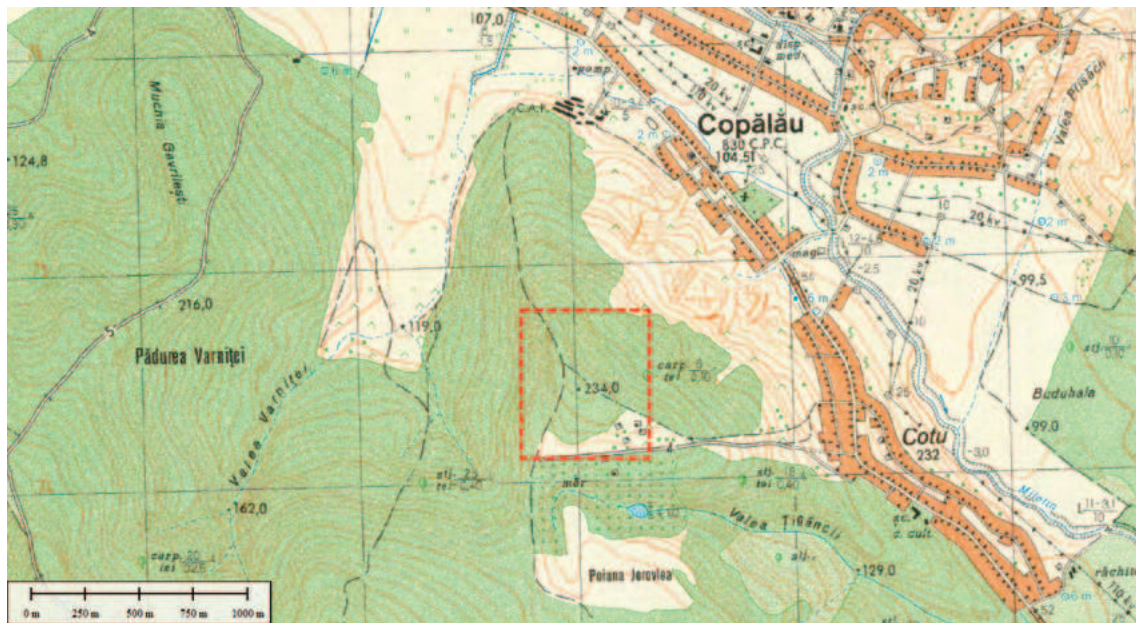


Figure 46. Cotu – Copălău-Cetate hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the northern part of the Moldavian Plateau, more precisely on the eastern branch of the forested massif Dealul Mare, near the contact with the Jijia Plain. The site occupies the northern end of the Jorovlea plateau, a plateau that reaches a height of approx. 234 m, dominating with approx. 100–130 m difference in level the surrounding areas lower. The area of visibility is wide in all directions, except towards the west. **C.1.a.** Currently, the terrain is covered by forest; **C.1.b.** The state of preservation is good, but there are some areas affected by logging.

C.2. In the immediate vicinity are a number of springs and brooks alimentering the Țiganca and Valea Varniței brooks.

C.3. 47° 36' 9" N, 26° 50' 21" E.

C.4. Approx. 234 m.

C.5. Around 100–130 m.

D. Description

D.1. Enclosed plateau; single enclosure;



Figure 47. Cotu – Copălău-Cetate hillfort on Google Earth satellite images.

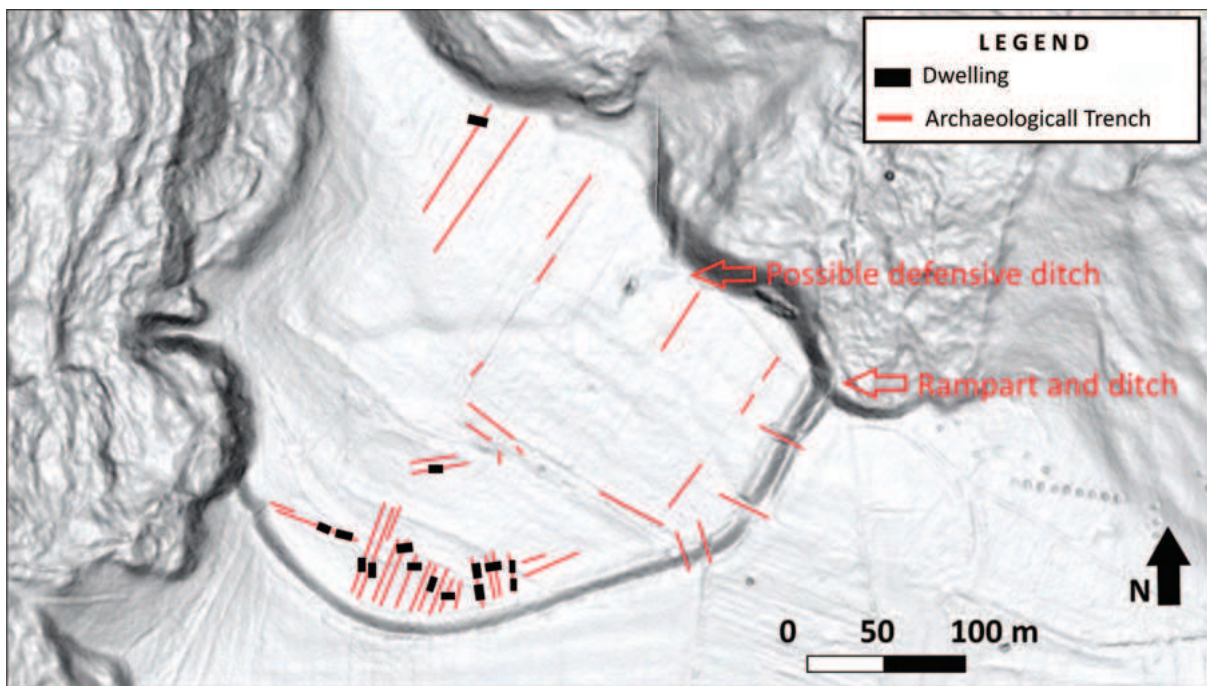


Figure 48. Cotu – Copălău-Cetate hillfort. Archaeological sections and Early Late Iron Age dwellings superimposed on the results of the LiDAR scan.

D.2. 5th–3rd centuries BC; **D.2.a.** Eneolithic (Cucuteni Culture).

D.3. Rampart with ditch.

D.4. Approx. 8 ha.

D.5. Description of the archaeological situation

The site was discovered during the field research carried out in 1973 for the drafting of the archaeological repertoire of Botoșani County²¹⁹. The south side – easily accessible from a military

²¹⁹ RAJ Botoșani 1976, p. 72–73.

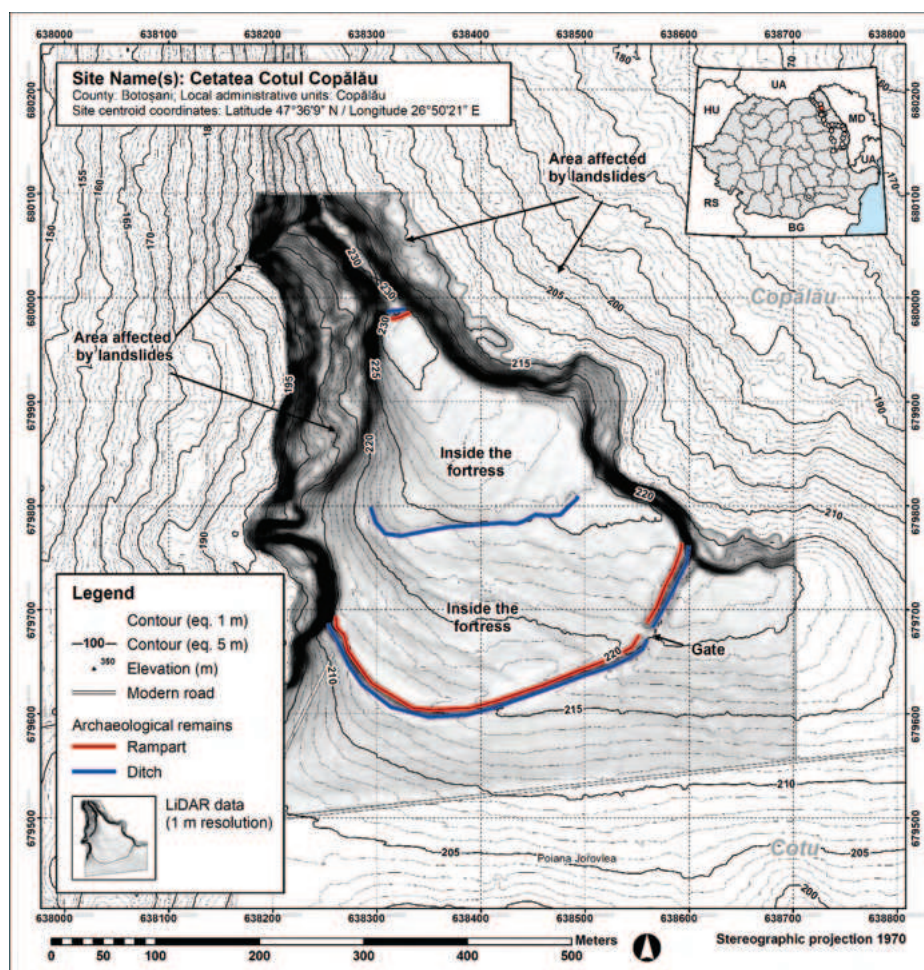


Figure 49. Cotu – Copălău-Cetate hillfort. Interpretation map.

point of view, is barred by a rampart with an adjacent ditch; to the north, the narrow ridge road that descends towards the village of Copălău is in its turn barred with a small rampart and ditch. The eastern and western sides of the plateau are (apparently) unfortified, being defended by steep slopes. It is interesting to note – both in the field and on the DEM, the presence of a ditch, quite clogged, inside the enclosure. In our opinion, it could be related to the dwelling from the Eneolithic period, the Cucuteni discoveries being concentrated (mainly) to the north of it.

The five archeological research campaigns resulted in 45 distinct archeological trenches, 38 being carried out inside the enclosure. To these were added 23 adjacent cassettes. Another seven trenches were made in order to study the defensive system²²⁰.

The trenches had variable lengths and widths of approx. 1.5 m, being relatively evenly distributed over the entire surface of the enclosure. 19 dwellings were discovered, 15 from the Late Iron Age and four from the Eneolithic. Only three pits were found, and the authors suspected that these may have played a ritual role.

	500–450	450–400	400–350	350–300	300–250	250–200
Rhodos Amphorae						
Chios Amphorae						
Sinopean Amphorae						
Thasos Amphorae						

²²⁰ Șovan, Ignat 2005, p. 35.

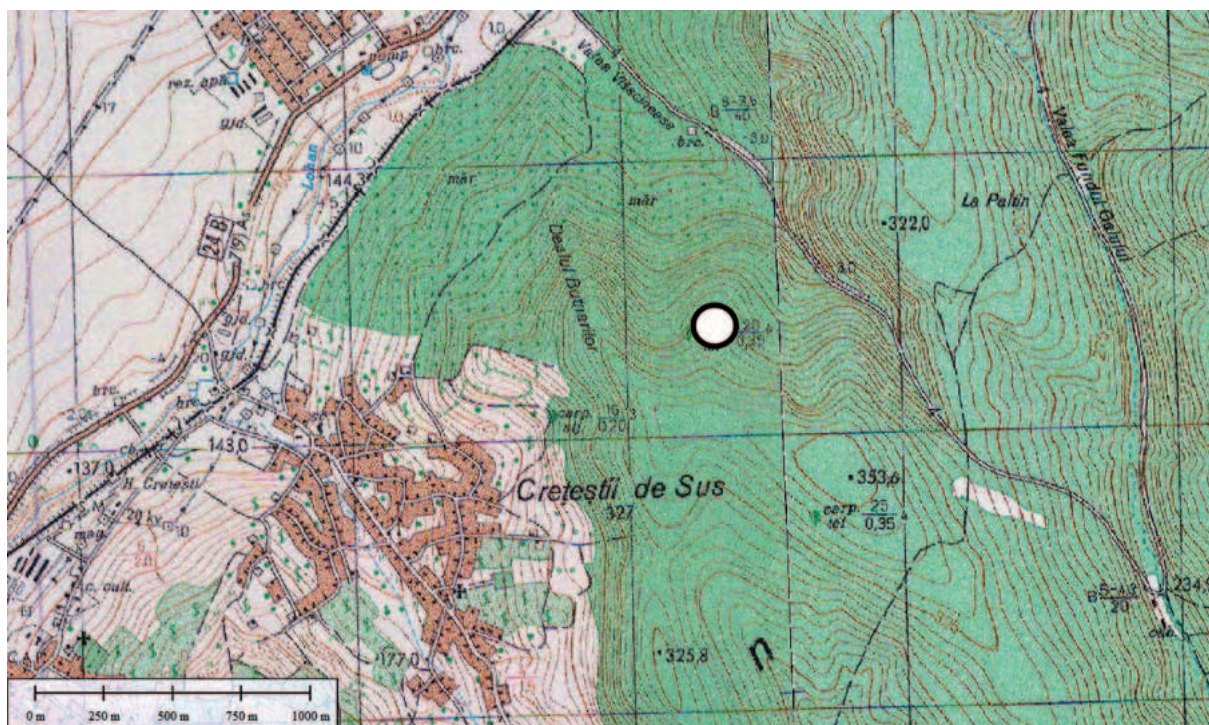


Figure 51. Crețești-Cetățuia hillfort on 1:25 000 topographical map of Romania.



Figure 52. Crețești-Cetățuia hillfort. Photo of the rampart seen from the inside (M. Oancă).

of a hilly landscape. The plateau is surrounded on all sides by steep slopes. The only part accessible from a military point of view is the southern part, where defensive system is located, consisting of a rampart with an outer defensive ditch; **C.1.a.** Currently, the terrain is covered by forest; **C.1.b.** The state of preservation is good, but there are some areas affected by logging.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 46° 38' 45" N, 27° 59' 45" E.

C.4. Approx. 315–330 m.

C.5. Around 100–150 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. around 5 ha.

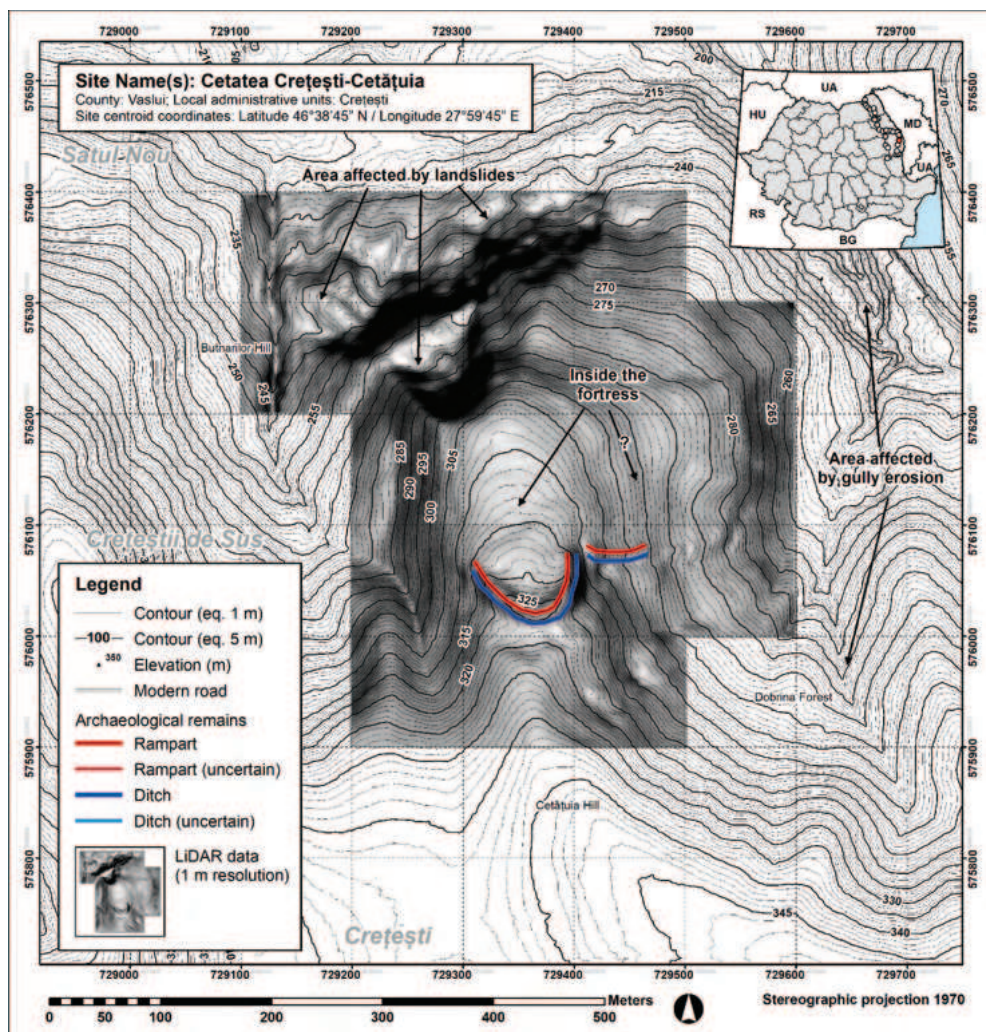


Figure 53. Crețești-Cetățuia hillfort. Interpretation map.

D.5. Description of the archaeological situation

Vague data about a wooded hill named “Cetățuia” located somewhere in the north-western part of Șîșcani, at the border with Curteni, is found in older literature²²¹; but according to more extensive data found in the *Questionnaire* of A. Odobescu, it seems that the above mentioned “Cetățuia” might

²²¹ Lahovari 1899, p. 347.

not coincide with the discussed site²²². In any case, the first description of this hillfort belongs to A. Florescu, who together with Gh. Melinte visited it 1967 and 1971²²³.

The results of our field survey will be described in the following. The defensive system is clearly visible only on the southern flank. It starts in the western part with rampart doubled by ditch, with length of approx. 130 meters and disposed in a semicircular shape, probably a “bastion”, followed by a small interruption – a possible gate or a later intervention. Then, follows a sector of 55 meters of straight route, in a west-east direction, followed by another interruption – another possible gate. Following that, the rampart continues to the east for approx. 50 meters, then it turns slightly to the north where it gradually dissipates. The preserved height of the rampart oscillates between 1.5–5 meters high, while the width at the base is between 6 and 10 meters. The ditch has a depth between 1.5–2 meters and a width of approx. 5–6 meters. The size of the defensive system is more pronounced in the area of the semicircular “bastion”. As for the other sides, the slight traces of terracing on the east side observed both by us and by the colleagues who researched the objective from a geomorphologic perspective²²⁴, lead us to assume that they could have been closed with a palisade. The total enclosed area is approx. 5 hectares.

In some segments of the rampart we could observe the presence of large numbers of burnt adobe, some with beam imprints of various sizes, which leads us to consider the existence of a large wooden superstructure (a palisade), set on fire perhaps during a siege. Of course, in the absence of archeological excavations, it is difficult to give definite answers.

E. Bibliography:

Florescu, Melinte 1971, p. 130; Coman 1980, p. 99; Zancu 1998, p. 128–129; Teodor 1999, p. 146; Arnăuț 2003, p. 207; Haheu 2008, p. 79; Măndescu 2010, Cat., p. 63; Niculiță *et alii* 2019; Berzovan *et alii* 2020a, p. 162–163; Florescu 2022, p. 50.

III.1.14. Crivești-Cetate (Strunga commune, Iași County)

A. Crivești-Cetate / Cetățuia / Dealul Viei.

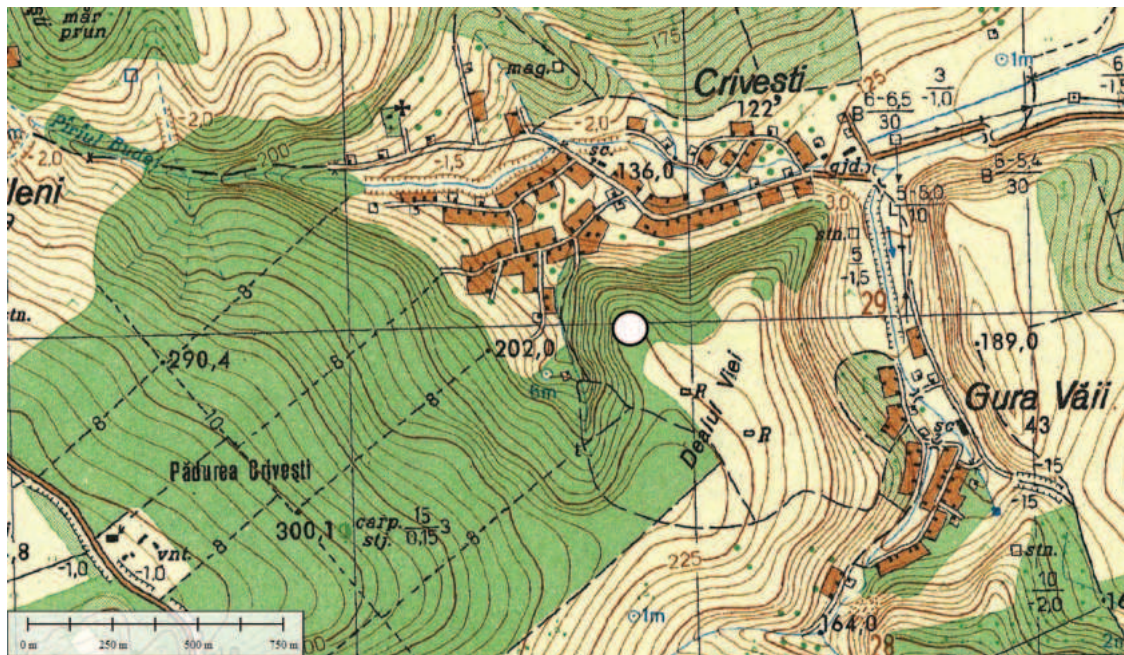


Figure 54. Crivești-Cetate hillfort on 1:25 000 topographical map of Romania.

²²² Clit 2019, p. 132–133.

²²³ Florescu 2022, p. 50.

²²⁴ Niculiță *et alii* 2019.



Figure 55. Crivești-Cetate hillfort. Google Earth satellite image.

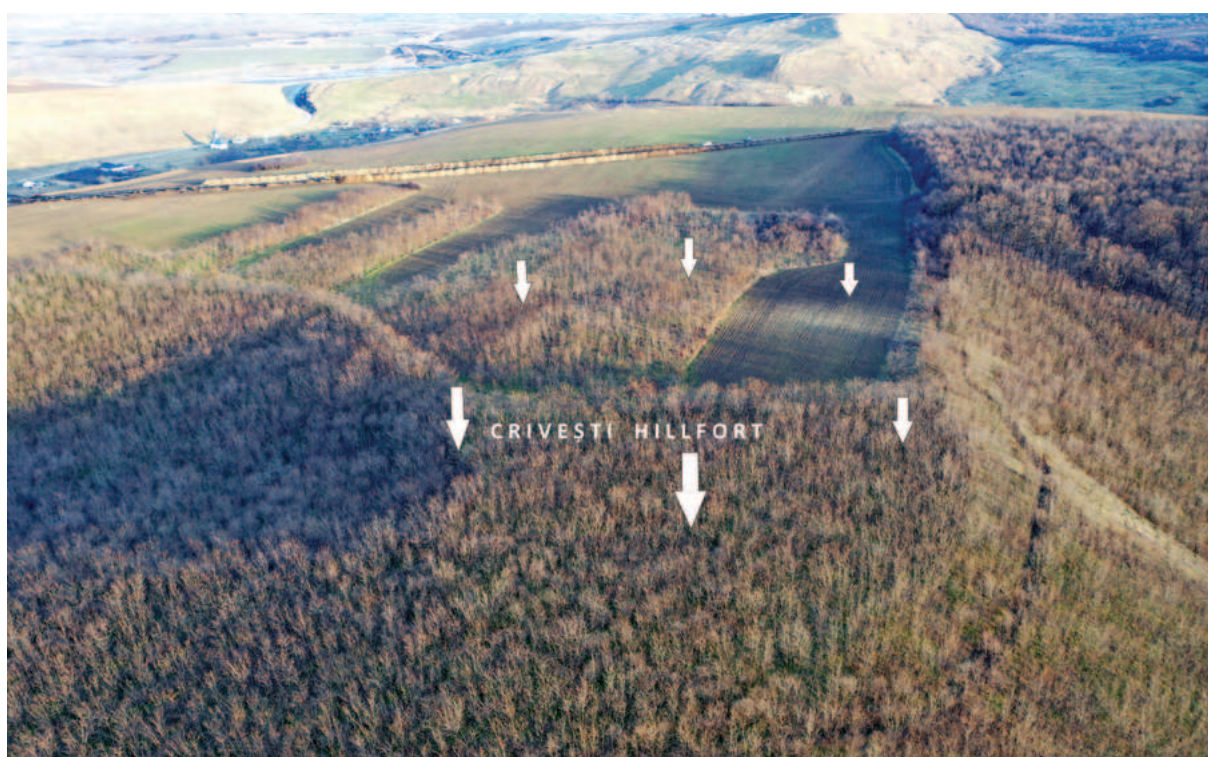


Figure 56. Crivești-Cetate hillfort. Oblique aerial photography. Light area on ploughed field indicate the remains of the rampart and ditch (A. Berzovan, C. Borangic).

B. Various surveys during the 19th century; field survey by C. Cihodariu in 1951; field survey by N. Zaharia in 1955; field survey by V. Chirica during 1983; field surveys by D. Boghian and C. Mihai between 1985–1987; field survey by D. Boghian, A. Berzovan and S. Benea between 2016–2017; field survey by A. Berzovan, D. Aparaschivei, S. Honcu, S. Boțan and C. Borangic – 2021; rescue excavation in the hinterland by D. Aparaschivei, A. Berzovan, S. Honcu, C. Boțan, A. Gligor and C. Borangic – 2021.



Figure 57. Crivești-Cetate hillfort. Oblique aerial photography. Light area on ploughed field indicate the remains of the rampart and ditch (A. Berzovan, C. Borangic).

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the northwestern part of the Central Moldavian Plateau, at its contact with the Strunga – Ruginoasa passage, in an area dominated by plateaus delineated by deep valleys. The fortress occupies a northern promontory of the Dealul Viilor plateau. It is located at an altitude of approx. 225 m, dominating with approx. 100 m difference in level the surrounding areas lower. The area of visibility is wide, especially to the north, to the south the view is blocked by higher heights. **C.1.a.** Currently, part of the terrain is used in agriculture, part covered by forest. **C.1.b.** The state of preservation is precarious; the hillfort was affected by modern military works (during WW2) and by intensive agriculture.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 47° 11' 38" N, 26° 55' 52" E.

C.4. Approx. 223 m.

C.5. Around 100 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 4th–3rd centuries BC. **D.2.a.** Eneolithic (Cucuteni Culture); Late Middle Age.

D.3. Rampart with ditch.

D.4. around 2.50 ha.

D.5. Description of the archaeological situation

The earliest data about the hillfort are to be found in the *Questionnaire* of A. Odobescu. Further field surveys were made after 1950s by various researchers and archaeologists from Iași. Most of the finds (especially pottery) belonged to the 4th–3rd centuries BC period.

The hillfort presents an approximately oval shape, with a long axis of about 190m in the direction SE – SE and 120 m on the SV – NE transverse axis, covering a total area of approx. 2.5ha. The degree of conservation is quite modest, the fort being heavily affected various agricultural works, especially by the military arrangements made during the Second World War. Numerous bunkers were built,

as well as an extensive trench system, that ultimately fell during the second Iași – Chișinău offensive in late August 1944. Thus, the ancient defensive system consisting of rampart and ditch is visible mostly in the southern and south-eastern side; any attempt of reconstructing the western, eastern and northern part *has to be viewed with caution*.

In the paper published in 2017, we estimated, based on our field survey, that the hillfort represented the center of a much larger habitation complex extending over much of the Dealul Viilor Plateau. During 2021, the Iași Institute of Archaeology coordinated rescue excavations in this area; the rescue excavations confirmed a low density early Late Iron Age in the immediate hinterland of the Crivești fort; storage pits and a ritual pit (?) were uncovered, as well as an atypical inhumation burial from the 4th–3rd centuries BC.

E. Bibliography:

Florescu 1971, p. 108; Florescu 1980, p. 12–13; Zaharia *et alii* 1970, p. 184–185; RAJ Iași II, 1985, p. 380; Turcu 2002, p. 74–75; Arnăuț 2003, p. 207–208; Boghian *et alii* 2017, p. 201–206; Berzovan 2019, p. 46–47; Berzovan 2019a, p. 78–79; Florescu 2022, p. 51.

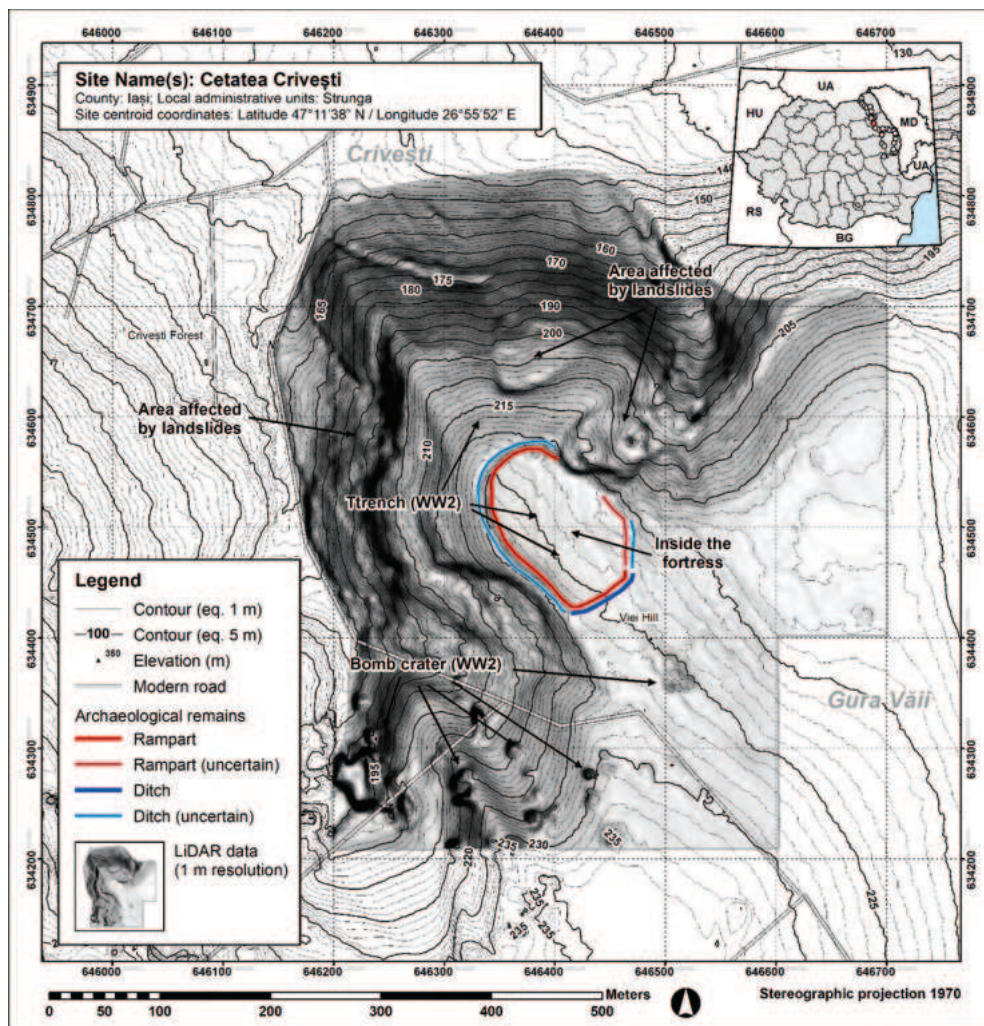


Figure 58. Crivești-Cetate hillfort. Interpretation map.

III.1.15. Dagâța-Dealul Șanțurilor (Iași County)

A. Dagâța-Dealul Șanțurilor / Cetate or Poienile-Dealul Șanțurilor (Dagâța commune).

B. Field survey by A. Berzovan in 2018 and 2020.

C. Geographical positioning:

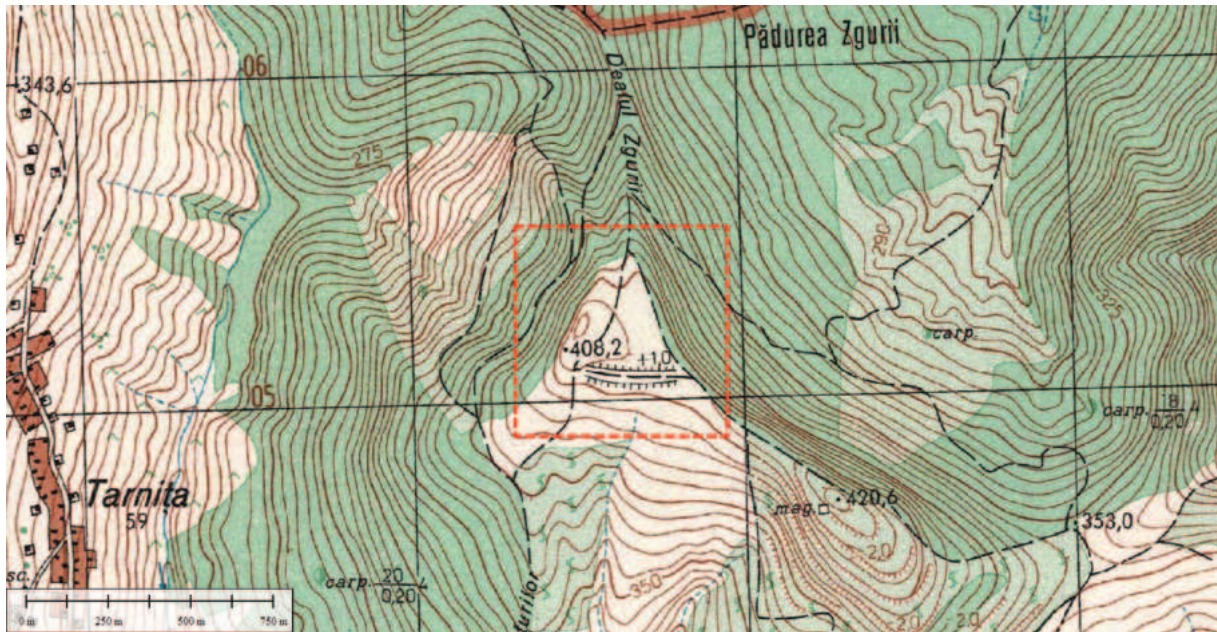


Figure 59. Dagâța-Dealul Șanțurilor hillfort on 1:25 000 topographical map of Romania.

C. 1. From geographical point of view, the site is located in the Central Moldavian Plateau, more precisely in its western area. It occupies the high plateau of *Dealul Șanțurilor* [Hill of the Ditches], at the source of Petriș stream, a tributary of Mănăstirii Valley from the Bârlad river basin. The point is located at an altitude of approx. 400 m, dominating with approx. 150–200 m difference in level the surrounding areas lower. The viewshed is excellent, especially towards the south and southwest. The fortification elements were built on the southern side, the only one easily accessible and usable from a military point of view. **C.1.a.** Currently, the terrain is covered by pastures and agricultural fields; **C.1.b.** The state of preservation is precarious, the rampart and ditch are affected by agricultural works.



Figure 60. Dagâța-Dealul Șanțurilor hillfort. Google Earth satellite image.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 47° 58' 47" N, 27° 12' 15" E.

C.4. Approx. 400 m.

C.5. Around 150–200 m.

D. Description

D.1. Enclosed plateau; single enclosure (?).

D.2. 5th–3rd centuries BC (uncertain); D.2.a. Middle Paleolithic.

D.3. Rampart with ditch.

D.4. Around 10 ha.

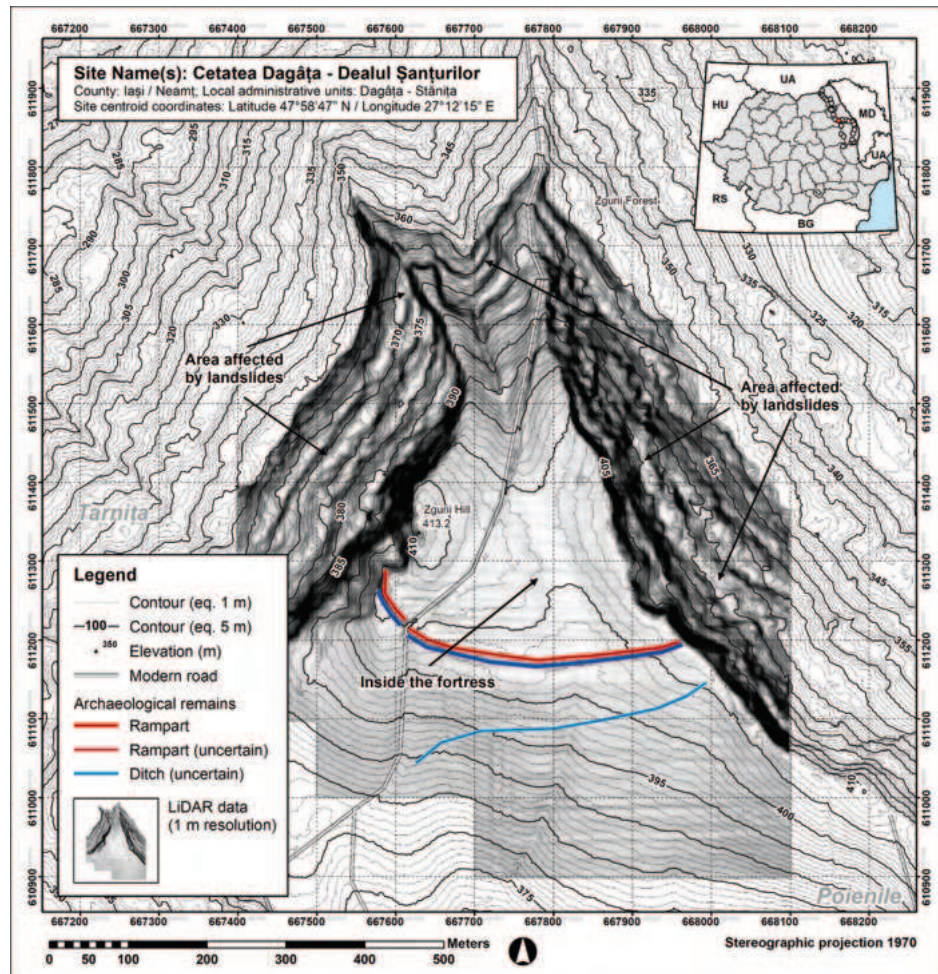


Figure 61. Dagăta-Dealul Șanțurilor hillfort. Interpretation map.

D.5. Description of the archaeological situation

Vague data about the existence of fortification works in this area came from the Archaeological Repertory of Iași County²²⁵, but we have no knowledge of previous field surveys in the area.

The rampart seems to have a width base of approx. 15–18 m, while the adjacent ditch is about 5 to 6 m wide. The height the rampart varies between 0.7–1.5 m. The area was heavily affected by the intense ploughing. The defensive elements are better preserved on the western side. The ditch and the rampart enclose an area of approx. 10 ha. In the southern area of the hill, towards the village of Poienile, another possible anthropic ditch can be seen on the DEM as well as on the satellite images, with a visible opening of approx. 10 m, in its turn heavily flattened by intense agriculture; it could represent the limit of a second, much larger enclosure.

²²⁵ RAJ Iași I 1984, p. 120.

During our field surveys we could not find any archaeological material, except for a flint fragment that most likely belongs to the Middle Paleolithic Period²²⁶. The yellowish soil, devoid of pigment and archaeological materials of any sort, does not suggest at first sight an intense habitation. As far as we were able to observe, it seems that this was a refuge fortification. At the moment we lack any concrete argument to date the defensive works in the early period of the Late Iron Age (or in any other period). However, considering the existence of obvious typological similarities of this fortification to other sites dated beyond a doubt in the Late Iron Age (for example, the fortress from Cotu Copalau), we have decided to insert this point in our volume as a possible place of interest.

E. Bibliography:

RAJ Iași I 1984, p. 120; Berzovan 2019, p. 48; Berzovan 2019a, p. 80.

III.1.16. Dobrovăț-Cetățuia (Iași County)

A. Dobrovăț-Cetățuia.

B. Field survey by N. and V. Pușcașu in 1974; test diggings by N. Pușcașu in 1974; field survey by M. Tanasachi in 1981–1982; field surveys by A. Berzovan between 2016–2019; archaeological diggings by A. Berzovan in 2019 and 2021.

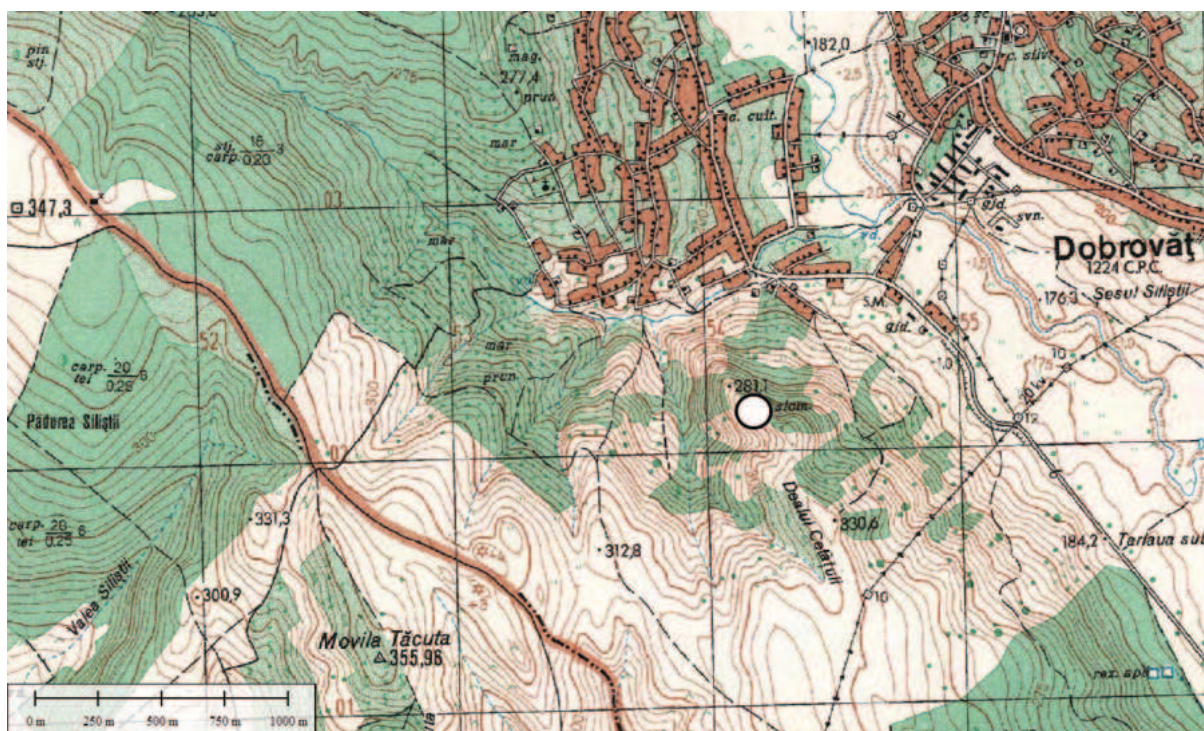


Figure 62. Dobrovăț-Cetățuia on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the area of the Central Moldavian Plateau, more precisely on the southern branch of the so-called Iași Coast [Coasta Iașilor]. It occupies the elongated promontory of a hilly peak, bordered on three sides by steep slopes, at an altitude of approx. 280–290 m, dominating with approx. 80–90 m difference in level the surrounding areas lower. The visibility area is not very wide, but it allows the surveillance of the depression area where the modern village of Dobrovăț is located. **C.1.a.** Currently, the terrain is covered by forest; **C.1.b.** The state of preservation is very precarious, the objective having been affected by numerous natural and anthropic interventions.

²²⁶ Determination made by our colleague from the Iași Institute of Archaeology, Bogdan Minea.

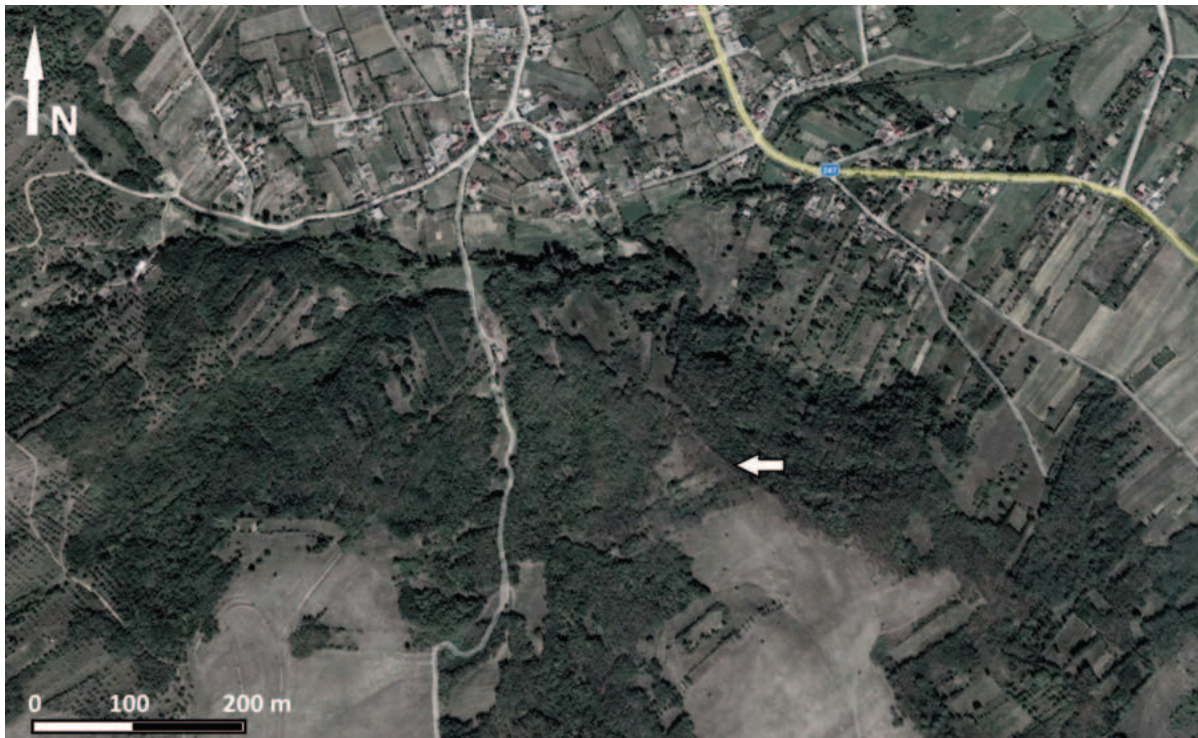


Figure 63. Dobrovăț-Cetățuia hillfort on Google Earth satellite images.

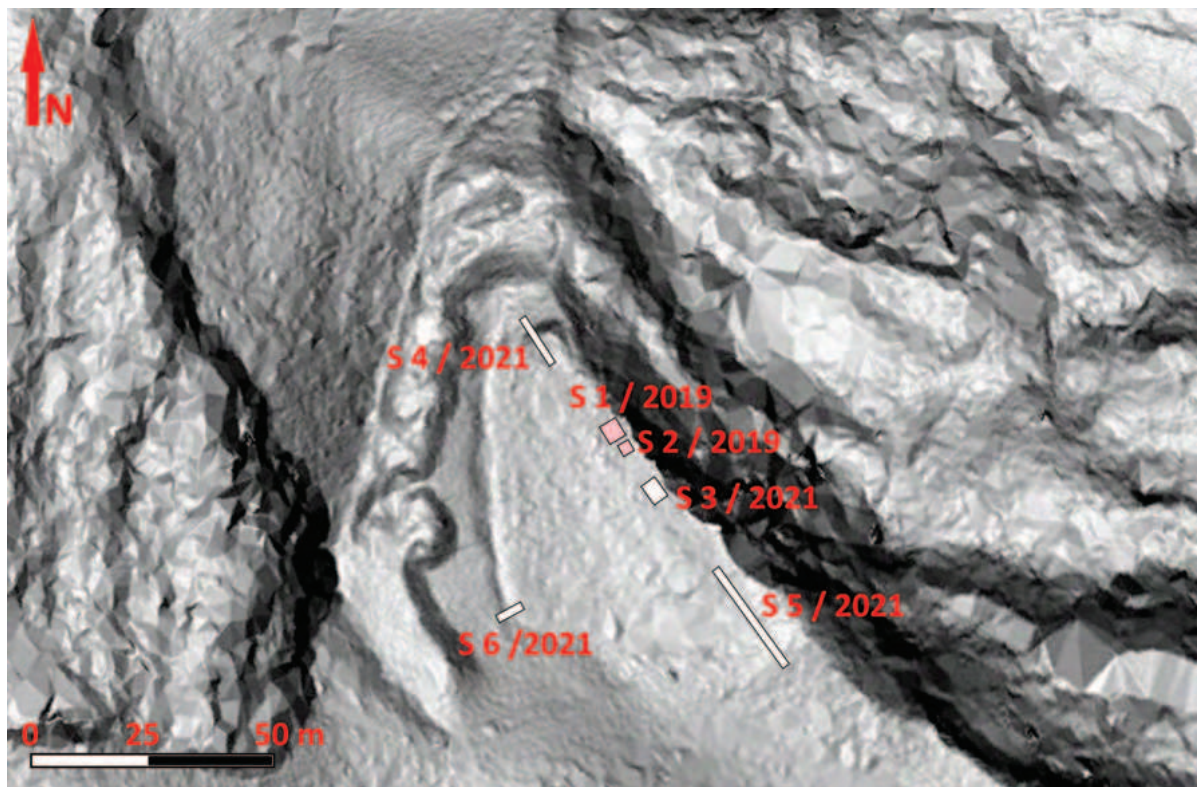


Figure 64. Dobrovăț-Cetățuia hillfort. Placement of sections from the 2019 and 2021 archaeological campaigns.

- C.2. To the east of the hillfort is a spring with permanent water.
- C.3. 47° 57' 07" N, 27° 42' 37" E.
- C.4. Approx. 280–290 m.
- C.5. Around 80–90 m.



Figure 65. Dobrovăț-Cetățuia hillfort. Aerial image (view from the west).

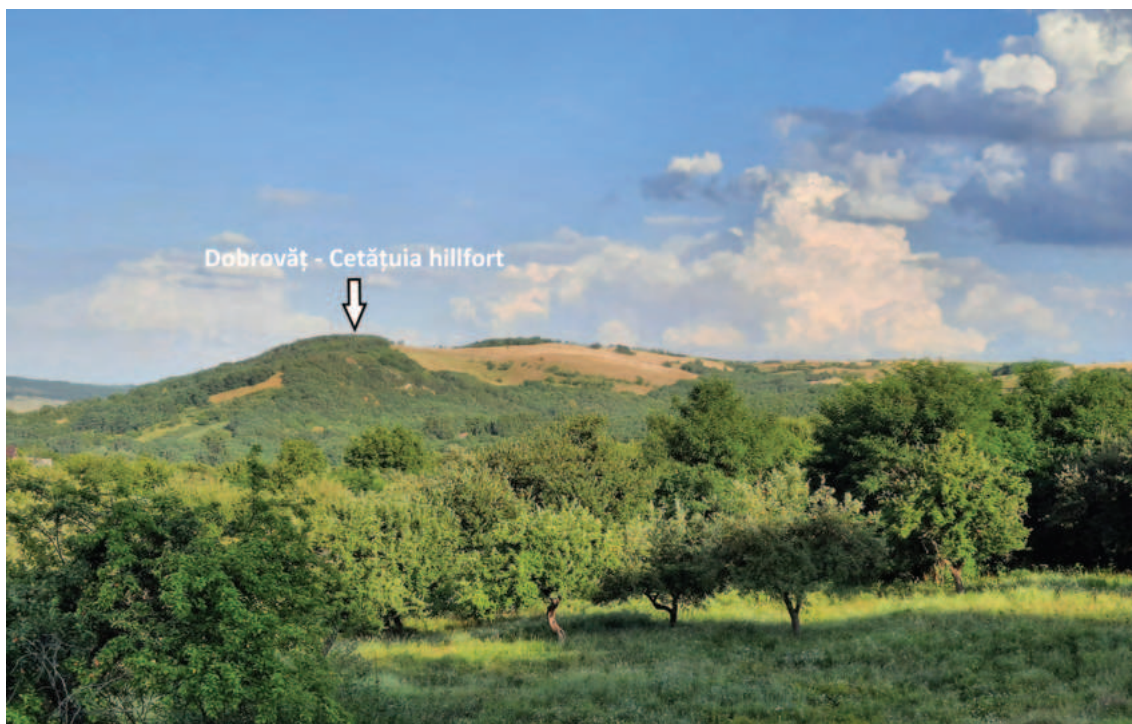


Figure 66. Dobrovăț-Cetățuia hillfort. Photo taken from near the Dobrovăț – *La Livadă* early Late Iron Age settlement.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. Around 0.77 ha.

D.5. Description of the archaeological situation

The first archeological researches were made by N. Pușcașu and V. Pușcașu, in 1974. On this occasion, they carried out a survey on Cetățuia, discovering a series of archeological artifacts, some of which reached the collections of the Moldova National Museum Complex in Iași. We did not have access to the excavation documentation, but on the plateau we could see the traces of two long trenches of approx. 20 m and width of approx. 0.5–1 m that could be related to the traces of these investigations. Between 1981 and 1982, new field research was conducted by M. Tanasachi. Starting with 2016, the site came to our attention, and in 2019 and 2021 we carried out two archaeological research campaigns, during which we opened a total of five archaeological trenches.

Reconstructing the topography of this site raised many problems, due to the numerous modern interventions that have affected the objective but also due to some natural hazards. Most likely from the second half of the 19th century – if not earlier, the Cetățuia Hill is cleared. Deforestation had led to landslides, especially on the north-eastern side, which gradually determined the collapse of a significant part of the plateau. To these natural hazards were added a series of anthropic interventions; thus, the western and northern area of the hill was used, according to local traditions since the Medieval period, as a stone quarry. The extraction of stones generated a series of well-individualized anthropic terraces, doubled by a series of earth ramparts, the latter presenting – as we appreciated with caution in the 2016 article, the appearance of fortifications works²²⁷.

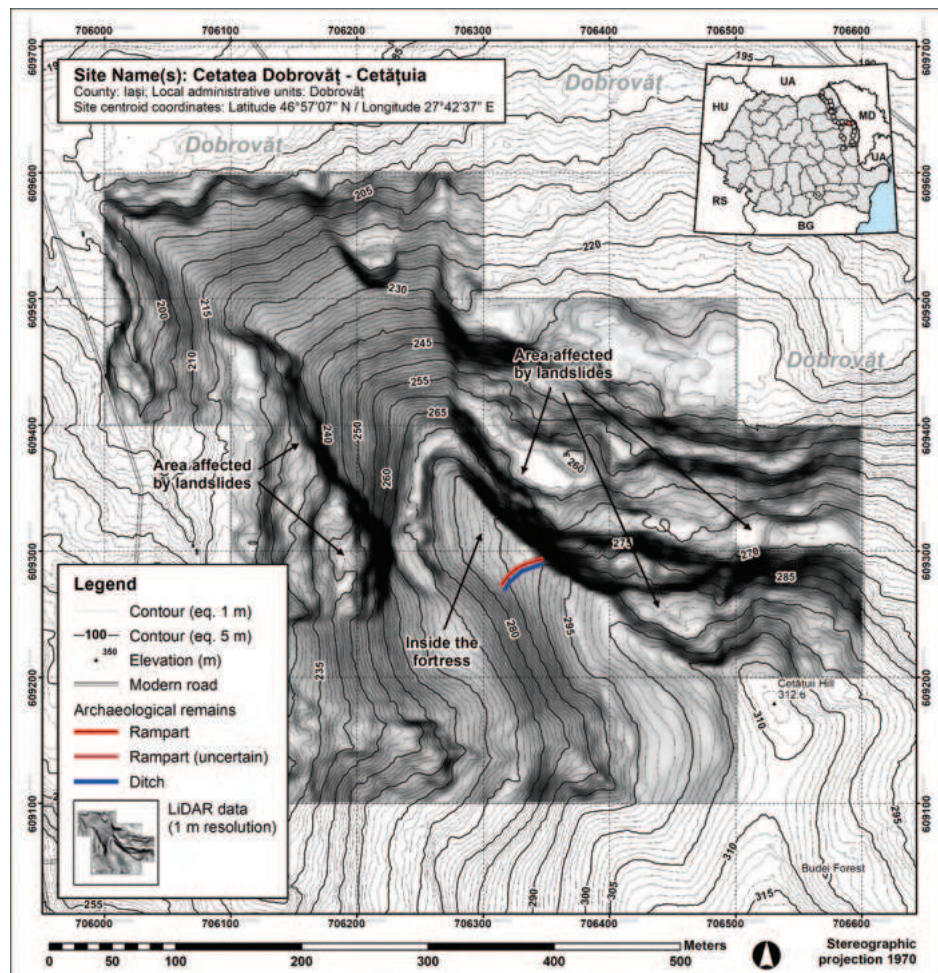


Figure 67. Dobrovăț-Cetățuia hillfort. Interpretation map.

LiDAR scans – despite their usefulness in many other situations – did not help much in clarifying these issues, so one of the objectives of the 2021 archaeological campaign was to clarify the

²²⁷ Berzovan 2016, p. 222–223.

issue of the defensive system of this site. We could see that the terraces on the north side, as well as the apparent ramparts, are the consequences of using the hill as a stone quarry. However, the ditch visible on DEM in the southern area turned out to be the defensive ditch of the hillfort, doubled in the back by a small rampart with a wooden palisade.

During our archaeological campaigns we managed to document also two surface dwellings, recovering from them a representative archaeological material that can be dated (roughly) between the 4th–3rd centuries BC. Since in 2020, at around 1,5 km NW we excavated a contemporary unfortified settlement at Dobrovăț – *La Livadă*. It is likely that the Cetățuia hillfort could have also represented a refuge point for communities living in the area of Dobrovăț Valley.

E. Bibliography:

Berzovan 2016, p. 222–223; Berzovan 2019, p. 50–51; Berzovan 2019a, p. 83; Berzovan, Borangic 2019.

III.1.17. Dochia-Cetățuia Sărățica (Neamț County)

A. Dochia-Cetățuia Sărățica / *Movila Săratei*.

B. Field surveys by C. Mătasă during 1930s; Field survey by A. Florescu, V. Mihăilescu – Bîrliba, Gh. Buzilă in 1969; test diggings by M. Alexianu in 1987; archaeological diggings by N. Bolohan and Gh. Dumitroaia in 1993, 1998, 1999; field survey by A. Berzovan in 2022.

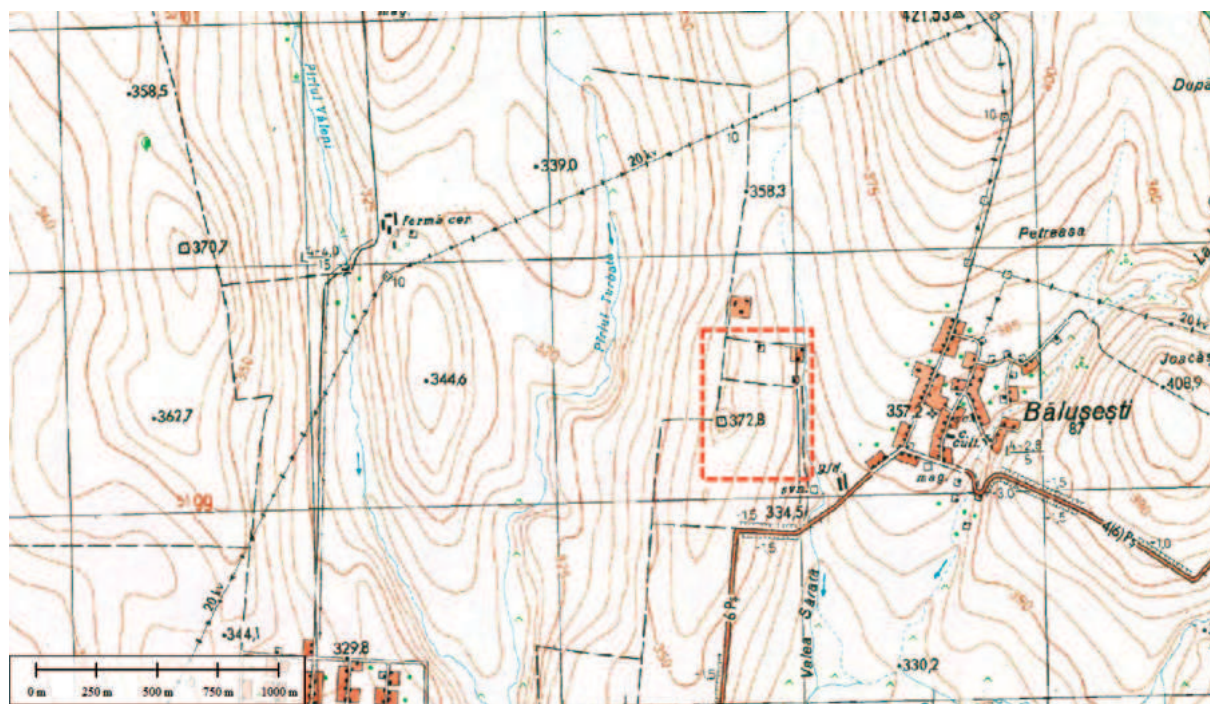


Figure 68. Dochia-Cetățuia Sărățica hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. The site is located in the Eastern Subcarpathian Hills, more precisely at the contact between the Neamțului Subcarpathians and the Cracău – Bistrița Depression, within a landscape dominated by low hills. It occupies the western slope of the Sărata Valley, at total altitudes between 330–375 m. In its highest point, it benefits from a large viewshed especially towards west. C.1.a. agricultural fields; C.1.b. The state of preservation is precarious; the site is affected by intensive agriculture.

C.2. The closest source of water is Sărata valley, that delineates the site towards east.

C.3. 46° 55' 36" N, 26° 35' 14" E.

C.4. Between 330–375 m.



Figure 69. Dochia-Cetățuia Sărățica hillfort on Google Earth satellite image.



Figure 70. Dochia-Cetățuia Sărățica hillfort. Aerial photo from west. Ramparts and ditches are visible as well as the massive mound (A. Berzovan).

C.5. Around 40 m.

D. Description

D.1. Hill-slope hillfort; single enclosure.



Figure 71. Dochia-Cetățuia Sărățica hillfort. Aerial photo from the east. Ramparts and ditches are visible as well as the massive mound (A. Berzovan).

D.2. 5th–3rd centuries BC (?). **D.2.a.** Early Iron Age; Late Bronze Age (?).

D.3. Rampart and ditch.

D.4. 22 ha.

D.5. Description of the archaeological situation

The site is known since the 1930s surveys carried out by C. Mătasă, but it also appears represented on the Austrian maps from the late 18th century as well as on the firing plans from the interwar period. The hillfort stretches between the Sărata Valley (east) and the point of maximum height of the interfluvium that separates this valley from the Turbata Stream (west). It has a rectangular shape with slightly rounded corners; the defensive elements (rampart and ditch) were severely flattened as a result of intensive agriculture. In the western area, the rampart and the ditch frame a massive mound (134 m long, about 90 m wide, about 10 m high). It is difficult to say whether it is a natural or anthropic; we might that given its size, we are dealing with a natural mound that suffered certain modifications. The presence of some massive “craters” and “depressions” on its top indicate the activity of treasure hunters. Regarding the chronology of the objective and its cultural classification, despite the fact that archaeological excavations were carried out, many question marks still remain.

Archaeological excavations began in the summer of 1993. A 30 × 2 m trench was made in the southern part of the mound, from which ceramic fragments and archaeozoological remains were recovered. In the same year, a topographic survey of the fortress was made. According to the authors, the stratigraphy consisted of the vegetal layer (I), a light brown layer with atypical ceramic fragments (II), a dark brown layer consisting of levels of beaten earth, burns, yellow clay lenses and rotten wood (III); in the southern part, layer III overlaps with a yellow lens. The last layer, V, is the sterile soil. In the 1998 report, the fortification was dated at the end of the middle period of the Late Iron Age. The 1999 campaign lasted only six days; at the same time, the authors somewhat revised the initial dating, considering that the beginnings of the fortification could be in the Early Iron Age. In any case, the existence of the hillfort can be put in connection with the numerous salt springs existing in the area.

E. Bibliography:

Dumitroaia 1994, p. 512; Bolohan 1994, p. 22; Florescu, Ioniță 1996, p. 68; Bolohan 1999, p. 37–39; Bolohan 2000, p. 37–39; Turcu 2002, p. 79; Arnăuț 2003, p. 212–213; Florescu 2022, p. 52–53.

III.1.18. Dumești / Rafaila – Zarea Rafeilei (Vaslui County)

A. Dumești / Rafaila – Zarea Rafeilei²²⁸.

B. Field research conducted by S. Ștefănescu in the 1980's; field research conducted by A. Berzovan, M. Oancă, M. Mamalaucă in 2020.

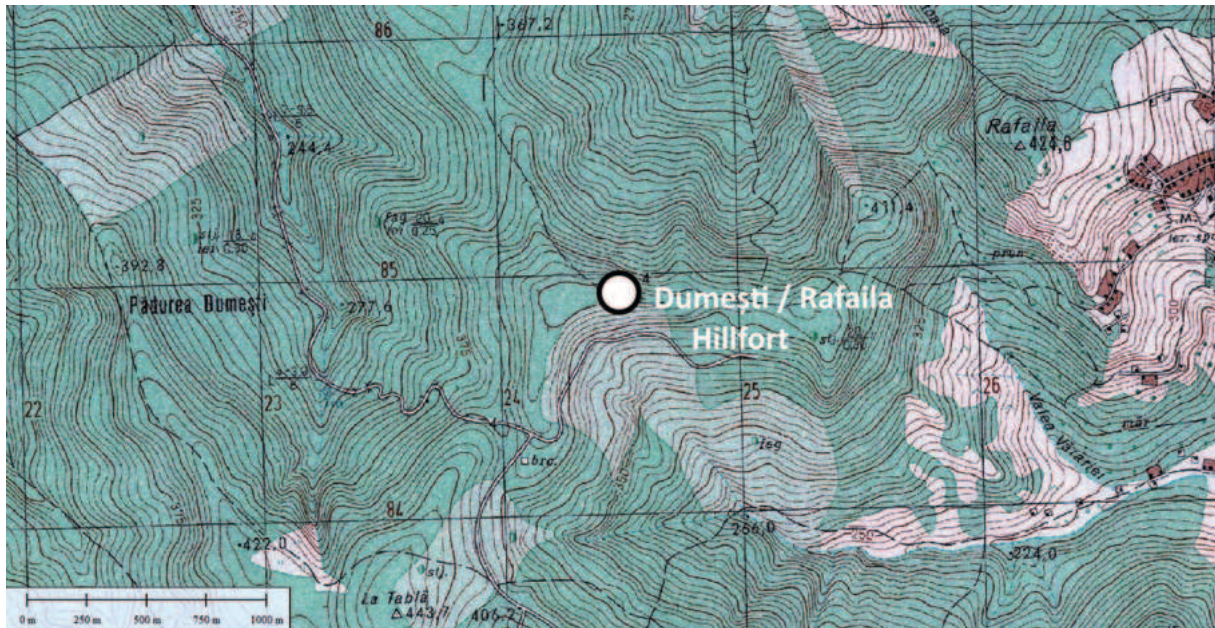


Figure 72. Dumești / Rafaila – Zarea Rafeilei hillfort on 1:25 000 topographical map of Romania

C. Geographical positioning:

C. 1. The site is located in the Central Moldavian Plateau. It is positioned on the hilly peak that separates the basins of the rivers Racova and Buda from the upper course of Bârlad, at an altitude of approx. 420–425 m. It occupies the eastern part of a plateau at the source of the Pietrosu brook and north of the coast called Fundul Stemnicului, dominating with approx. 250 m the lower surrounding areas. From an administrative point of view, we are on the border between the communes of Dumești and Rafaila, and this border passes approximately through the middle of the site. The fragmented relief of the area, with significant differences in level, gives the impression of a sub-mountainous landscape. The area of visibility is quite wide. To the north, the upper course of Bârlad river and the heights north of it could be monitored, the range extending also to the area of Dagăța hillfort²²⁹, and the one from Poiana Mănăstirii, (Țibana commune) from Iași county²³⁰. To the south and west, the viewshed is largely obstructed by other heights. Only to the southeast is visible the area occupied by the current commune Rafaila. The presence of the toponym “Drumul Liciului” [Liciu’s Road] is interesting²³¹, indicating the existence of a communication route over the hills certainly used at least since Medieval period, maybe even in previous times. This area was the most accessible way

²²⁸ The term “Zare” that we frequently encounter in the central-southern toponymy of the Moldavian Plateau, designating different prominent heights, also has, in addition to the known meanings, the meaning of “high peak”, “ridge”, “peak” (see <https://dexonline.ro/definitie/zare> consulted on 23.10.2020).

²²⁹ See in this chapter Dagăța-Dealul Șanțurilor (Dagăța commune, Iași County).

²³⁰ See in this chapter Poiana Mănăstirii – Între Șanțuri (Țibana commune, jud. Iași).

²³¹ From “Liciu”, personal name attested especially in Moldova from the regionalism / archaism “liciu” designating sea buckthorn (*Lycium halimifolium*).

of communication from the upper basin of Bârlad river to this point. **C.1.a.:** At the time of the last check (2020) the area was completely covered by forest. **C.1.b.:** The state of preservation is relatively good; some areas of the rampart and ditch were slightly affected by modern interventions (logging).

C.2. On the nearby plateau to the west are present a number of springs.

C.3. 46° 47' 50" N, 27° 19' 13" E.

C.4. Aprox. 420–425 m.

C.5. 250 m.

D. Description

D.1. Enclosed plateau; single enclosure;

D.2. 5th–3rd centuries BC.

D.3. Rampart with adjacent ditch.

D.4. 1.5–2 ha.

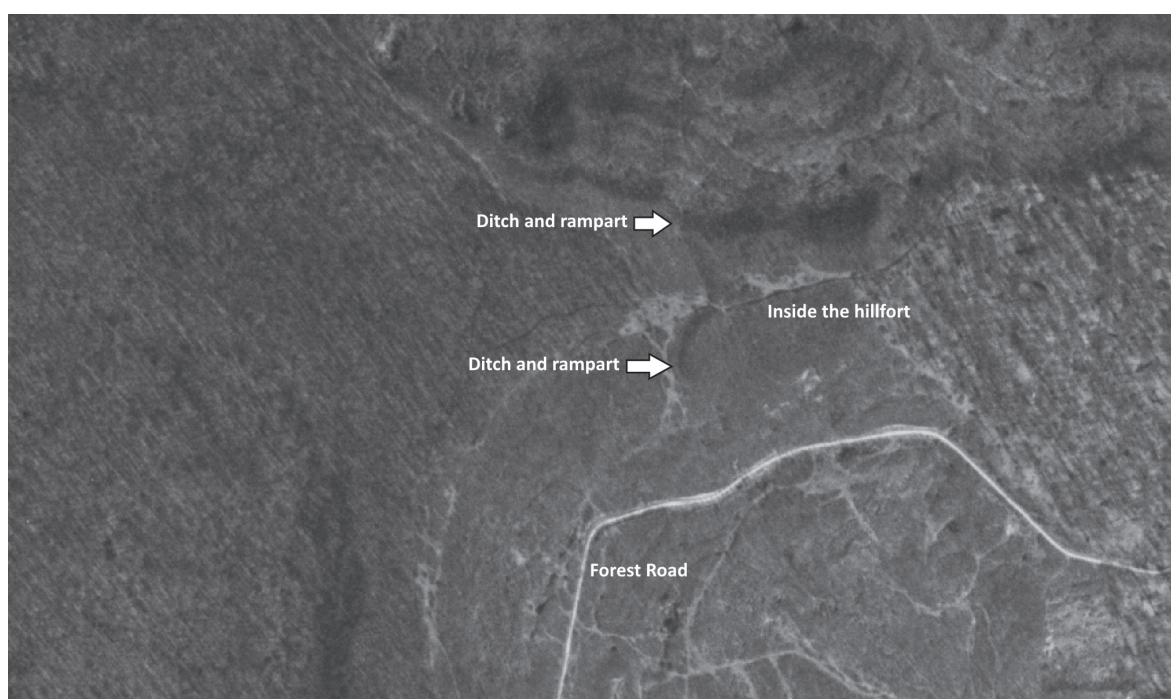


Figure 73. Dumești / Rafailla – Zarea Rafailei hillfort on 1975 satellite imagery made by US Airforce (after <https://earthexplorer.usgs.gov>)

D.5. Description of archaeological situation

The fortification elements visible on the surface consist of a rampart with a ditch. The rampart with the associated ditch starts from the northern edge of the plateau, going in a straight line, with an orientation NNV – SSE, on a distance of approx. 72 meters. After that follows a small opening – possibly the entrance gate, used by a modern exploitation road, after which the ditch and rampart changed their orientation, forming a semicircle with a length of about 100 meters facing west, probably as a “bastion”, which closes at the southern edge of the plateau.

The dimensions of the fortification elements vary. Thus, the earth rampart has heights ranging between 1.5–3 meters, with the width at the base between 6–8 meters. The ditch preserved a depth of about 1–1.5 meters, and an opening of about 4–8 meters. Due to the drainage of rainwater, its depth increases slightly towards the edges of the plateau.

The plateau towards north and south is characterized by rather steep slopes, so we could not see on the surface traces of fortifications. The closure to the east of the fortress raises certain questions, since we could not identify either on the DEM or on the ground clear elements of fortification in that area. However, this it could have consisted of a simple wooden palisade, impossible to notice

without archaeological excavation. We assume that the enclosure to the east could have been in the narrowing area of the plateau, marked by certain natural (?) accidents.

Regarding the total area, we estimate to cover between approx. 1.5–2 hectares. At this stage of the research it is difficult to say to what extent the terraces we observed in the southern area are natural or were arranged; however, they could have provided favorable conditions for the habitat, or for carrying out small-scale agricultural activities.

The search for archaeological material for the cultural-chronological framing was much hampered by vegetation and the presence of a consistent layer of leaves. However, we were able to identify in the northern part of the fortress, near the rampart and the edge of the plateau, an older pit which probably resulted from the uprooting of a tree. From here we were able to collect several ceramic fragments, especially pieces of handmade pottery, along with remnants of adobe and burnt clay, from the walls of a dwelling. The archaeological material, although not very representative, in our opinion can be framed widely during the 5th–3rd centuries BC; the presence of burnt wall remains shows that here was a permanently inhabited site.

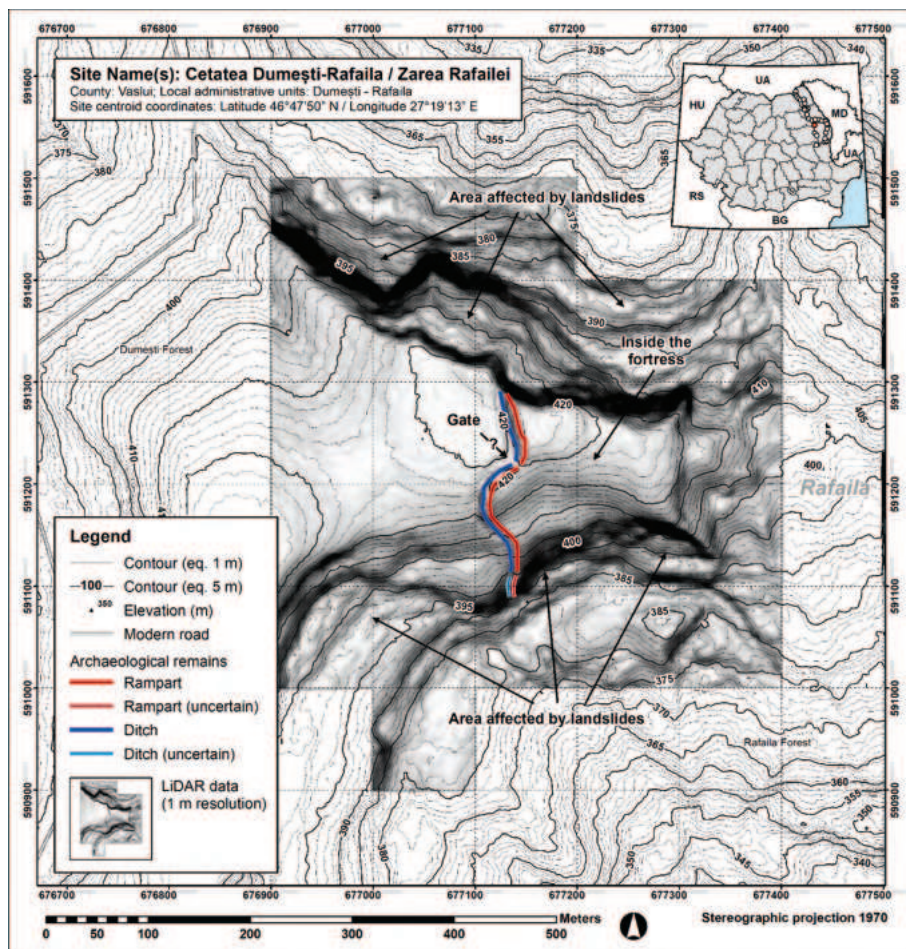


Figure 74. Dumești / Rafaila – Zarea Rafailei hillfort. Interpretation map.

D.6. Observations. Related tumular necropolis

At approx. 300 m west of the fortress, on the same plateau, there is a mound with a diameter of 12 meters and a preserved height of about 2 m, which, like many others in this part of Romania, shows traces of ancient excavations in the central area. It seems that the excavations were carried out by a teacher Gheorghe David, in the 1940s, and led to the discovery of some silver coins (currently lost)²³². In the area of Rafaila locality, another possible tumular necropolis is also reported (not verified by

²³² Ștefănescu 1998, p. 204.

us in the field, nor on DEM)²³³. Several traces of unfortified settlements with archeological materials from the 5th–3rd centuries BC are reported in the area²³⁴.

E. Bibliography:

Ștefănescu 1998, p. 204; Berzovan *et alii* 2020a.

III.1.19. Fedești-Cetățuia (Șuletea commune, Vaslui County)

A. Fedești-Cetățuia.

B. Field survey by C. Mateescu in the 1940s; field survey in 1950 by Gh. Coman; test-diggings by N. Gostar, S. Sanie, Ș. Sanie and Gh. Coman in 1964; archaeological diggings during 1997–1998 by T. Marin; field surveys by M. Oancă and M. Mamalaucă between 2012–2019; field survey by M. Oancă, M. Mamalaucă and A. Berzovan during 2020.

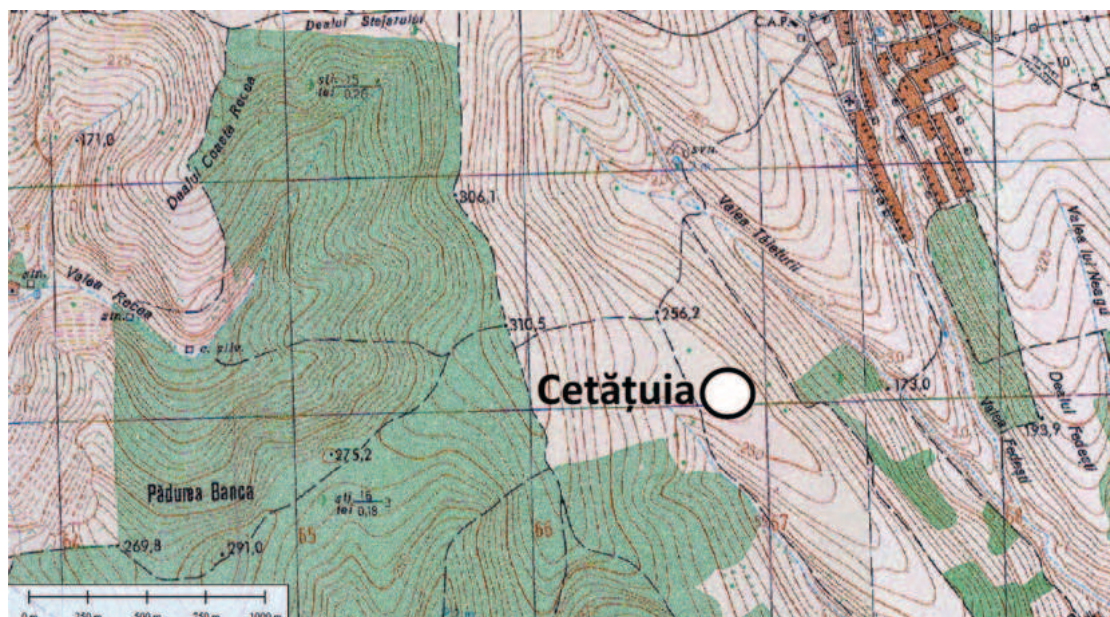


Figure 75. Fedești-Cetățuia hillfort on 1:25 000 topographic map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the southern Moldavian Plateau, more precisely in the Fălciu Hills area. The fortress occupied a wide interfluvium called Morilor Hill, bounded on the west by Horga Valley and on the east by Tăieturii Valley. The height and relief energy is lower, the area having a hilly appearance. The site is located at a total altitude of approx. 250 meters, dominating with approx. 30–45 meters the lower surrounding areas. The viewshed is quite good especially towards north and south. Unfortunately, the land on which the site is exploited agriculturally, which over time led to advanced degradation. The modern terracing carried out on the eastern slope of Morilor Hill also affected the site. C.1.a. Currently, the terrain is used in agriculture; C.1.b. The state of preservation is precarious; the site is affected by agriculture and deep plough.

C.2. In the vicinity are a number of springs and brooks.

C.3. 46° 17' 24" N, 27° 51' 55" E.

C.4. Approx. 250 m.

C.5. Around 30–45 m.

²³³ Ștefănescu 1998, p. 204.

²³⁴ Ștefănescu 1998, *passim*. At the same time, this study is discussing about several possible fortresses framed by the author between 4th–3rd centuries BC, often hypothetically in the absence of archaeological material or determinant traces of fortification elements. In order to clarify these reported situations, we consider necessary to continue the field archeological researches in the future.

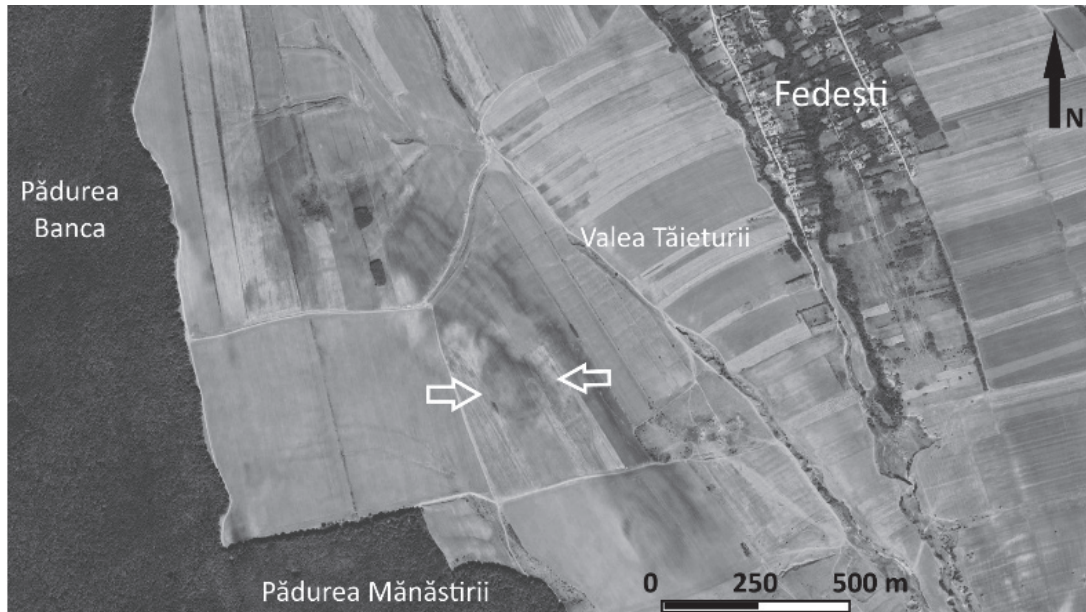


Figure 76. Fedești-Cetățuia hillfort. Google Earth satellite image.



Figure 77. Fedești-Cetățuia hillfort. Ruins of the rampart.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 4th century BC; **D.2.a.:** Eneolithic (Cucuteni Culture).

D.3. Rampart with ditch.

D.4. 2 ha.

D.5. Description of the archaeological situation

The site is known in the archaeological literature, being mentioned for the first time in the report made by Corneliu Mateescu to the National Museum of Antiquities. In 1950 the site was surveyed by Ghenuță Coman, and in 1964 an archaeological campaign was made, coordinated by Nicolae Gostar, Silviu Sanie, Șeiva Sanie and Ghenuță Coman. The results were not published, neither presented in detail, and in the archives of the Institute of Archeology in Iasi we have not been able to find (so far) anything useful about the results. The only information we found in a report presented by Dorin Popescu, that is quite confuse²³⁵.

²³⁵ For a detailed discussion on these issues, see in Berzovan *et alii* 2020a.

Field researches conducted, correlated with Google Earth satellite images on which the imprint of the elements of fortification is still visible – allowed us to make a few observations. The hillfort has an oval shape, with a length (on the NW – SE axis) of approx. 180 meters and a width (on the SV-NE axis) of approx. 140 meters. The rampart and the corresponding ditch are much flattened, barely reaching a height of 0.30–0.40 m. The total enclosed area is approx. 2 hectares.

During the excavations carried out between 1997 and 1998, five trenches were made. A single habitation layer was identified, dating from the early part of the Late Iron Age, 0.40 to 0.50 meters thick, with some sporadic fragments from Eneolithic (Cucuteni Culture). Eight pits were discovered, two of which provided more interesting data. In one of them were observed numerous burnt remains (burned beams, reddish earth, traces of ash). The other pit, *Gr. 2*, is funnel-shaped, 0.8 meters in diameter and 0.77 meters deep, with a significant inventory: complete and restorable vessels, a ceramic fragment modelled with a wheel, a few pieces of amphorae, four grinders fragmented and a Thracian-type fibula²³⁶. These finds can be dated into the 4th century BC²³⁷.

E. Bibliography:

Mateescu 1944, p. 53; Popescu 1964, p. 597; Zaharia *et alii* 1970, p. 344–345; Florescu 1971, p. 107; RAJ Vaslui 1980, p. 237; Teodor, Preda 1996, p. 129; Zancu 1998, p. 131–132; Marin 1999, p. 40–41; Teodor 1999, p. 150; Turcu 2002, p. 81; Arnăuț 2003, p. 215; Haheu 2008, p. 70; Măndescu 2010, Cat., p. 77; Berzovan *et alii* 2020a; Florescu 2022, p. 53.

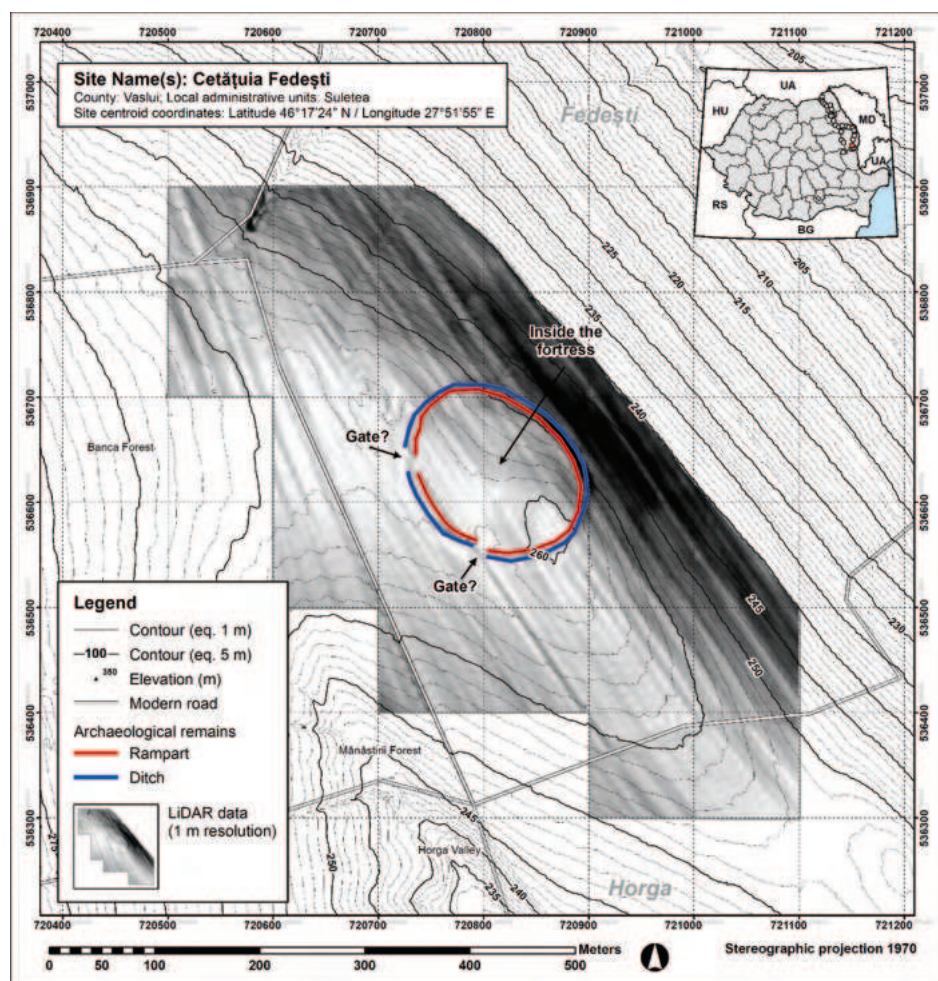


Figure 78. Fedești-Cetățuia hillfort. Interpretation map.

²³⁶ Marin 1999, p. 41.

²³⁷ Măndescu 2010, *Catalog*, p. 77.

III.1.20. Ibănești-Măgura Ibăneștilor (Botoșani County)

A. Ibănești-Măgura Ibăneștilor / Cetate / Zamca.

B. Field surveys during the late 19th century; field survey by A. Păunescu, P. Șadurschi and V. Chirica in 1974; archaeological diggings in 1986 and 1987 by P. Șadurschi and E. Moscalu; field survey by A. Berzovan and A. Kovács in 2021.

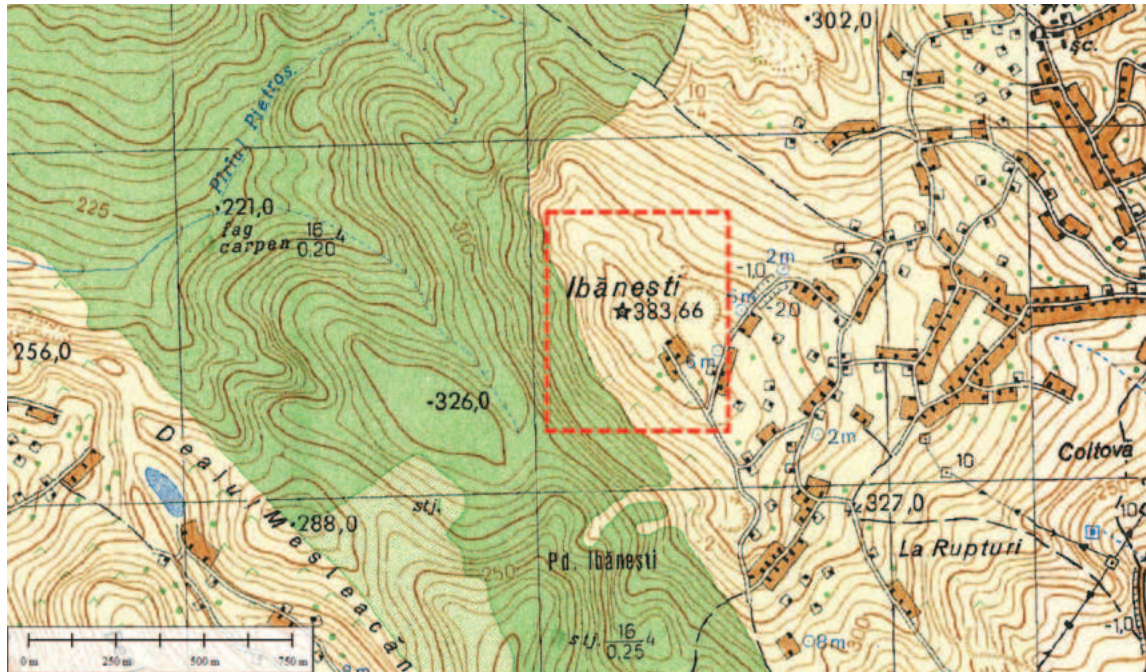


Figure 79. Ibănești-Măgura Ibăneștilor hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the northern extremity of the Moldavian Plateau, more precisely at the contact between the Bour Hills and the Jijia Plain. It occupies the top of a prominent hill, *Măgura Ibăneștilor*, at an altitude of approx. 370–380 m, which dominates with approx. 150–200 m level difference the surrounding areas lower. The hillfort has excellent visibility in almost every direction. **C.1.a.** Currently, the terrain is covered by houses of the village of Ibănești and pasture; **C.1.b.** The state of preservation is precarious; the fort was almost completely destroyed by various modern interventions.

C.2. There are a number of springs to the east.

C.3. 48° 03' 36" N, 26° 21' 03" E.

C.4. Approx. 370–380 m.

C.5. Around 150–200 m.

D. Description

D.1. Enclosed plateau (?); two enclosures (?).

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. (?).

D.5. Description of the archaeological situation

From the very beginning, we observed that this hillfort was severely affected by numerous anthropic interventions in modern period – the stone quarry – so that any attempt of reconstructing its plan must be viewed with *the necessary reservations*.

The oldest information about this fortress comes from A. Odobescu's *Questionnaire*, where we are told about the existence of a fortress with a circular defense ditch and two mounds: "*Ibanescii*,



Figure 80. Ibănești-Măgura Ibăneștilor hillfort on Google Earth satellite images.

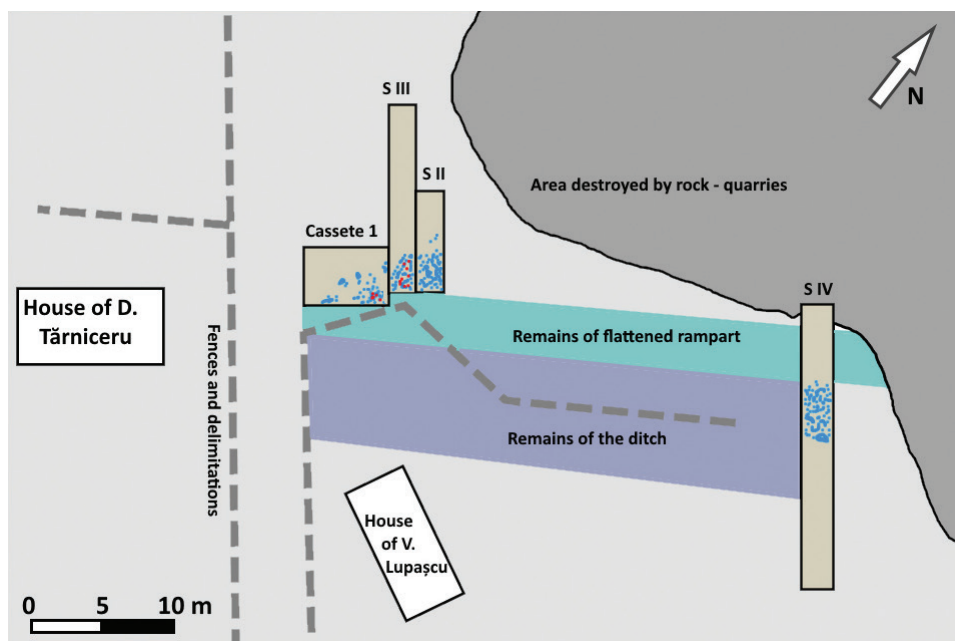


Figure 81. Ibănești-Măgura Ibăneștilor hillfort. Plan of the diggings (edited by A. Berzovan after Șadurschi, Moscalu 1989).

pe verfulu unei magure, ruinele unei cetățiui, coprindiendu ca ve-ua 40 stanjini, cu unu siantiu circular care anco are 1/1/2 stanjini înălțime și 30 stanj. lungime”. [”Ibănești, on the peak of a hillock, are the ruins of a fortress, encompassing around 40 fathoms, with a ditch that has 1–1/2 fathoms in height and 30 fathoms in length”]. In the Archaeological Repertory of Botoșani County the fortress is presented as having an area of approx. 2 ha, protected by ramparts and ditches, destroyed and preserved only on the eastern side²³⁸.

²³⁸ RAJ Botoșani 1976, p. 153.

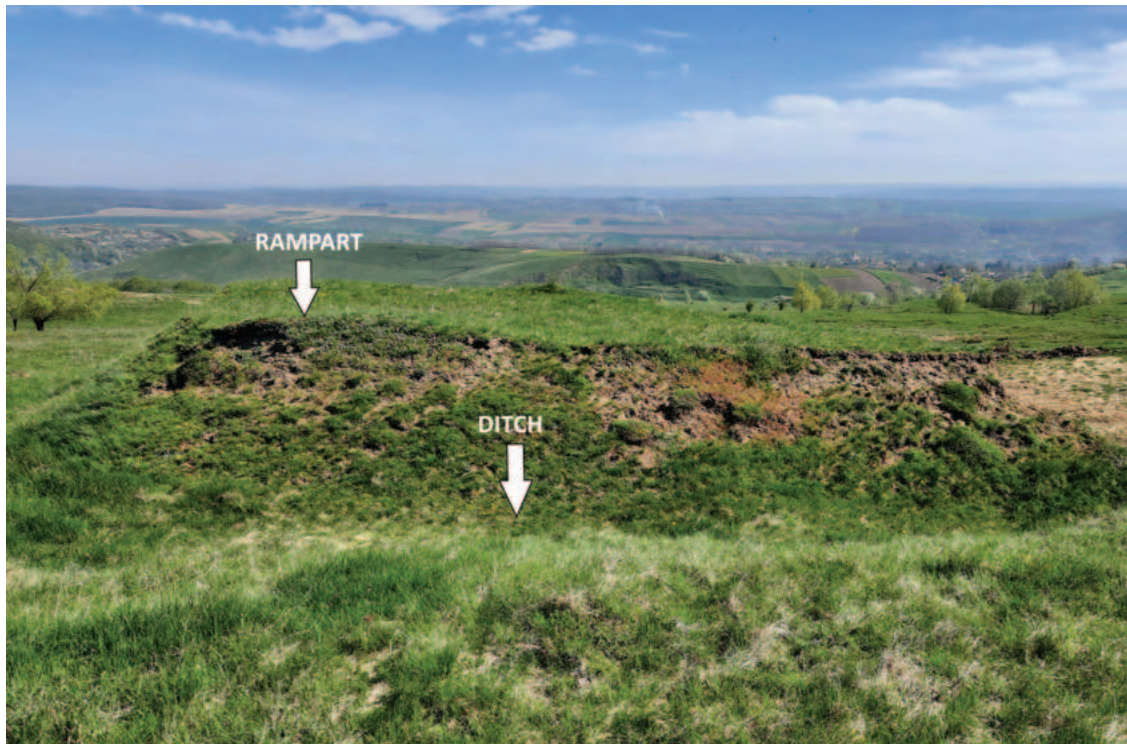


Figure 82. Ibănești-Măgura Ibăneștilor hillfort. Photography of rampart and ditch remains (A. Berzovan).

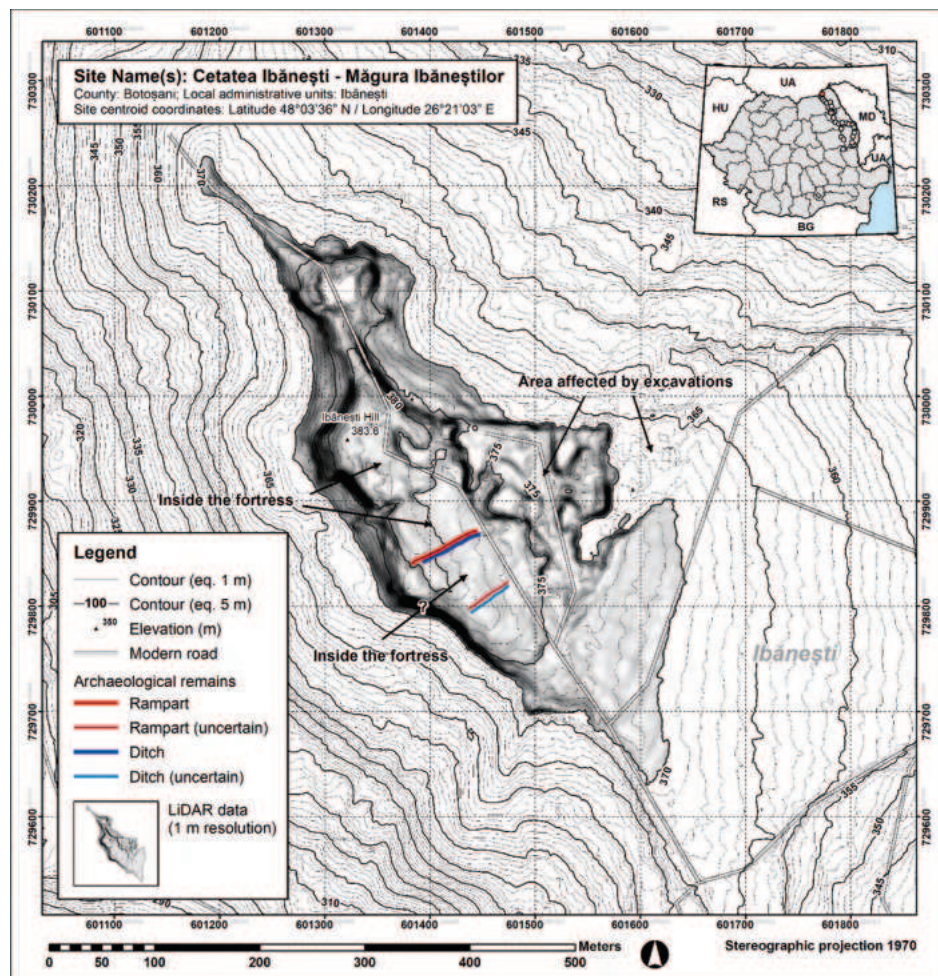


Figure 83. Ibănești-Măgura Ibăneștilor hillfort. Interpretation map.

Archaeological research carried out by P. Şadurschi and E. Moscalu in 1986 and 1987 had the goal to clarify the cultural and chronological framework of the site. A cassette (I) and three trenches (II–IV) were made, which managed to capture the remnants of the defensive system, especially the defensive ditch. The authors proposed the existence of two distinct phases of the use of the rampart and ditch, along with a general dating between the 5th and 3rd centuries BC.

Combining the data from the literature with our field observations and the visible elements on DEM, we assume that the defensive system was most likely meant to cover the south-eastern area, the only one that can be used from a military point of view. It cannot be excluded the presence of a second defensive line.

E. Bibliography:

Odobescu 1908, p. 128–129; Tocilescu 1880, p. 539; RAJ Botoşani 1976, p. 153; Şadurschi, Moscalu, 1989, p. 183–199; Turcu 2002, p. 91; Arnăuţ 2003, p. 226–227; Măndescu 2010, Cat., p. 90; RAJ Botoşani 2016, p. 252.

III.1.21. Măluştteni-Cetăţuia (Vaslui County)

A. Măluştteni-Cetăţuia.

B. Field survey by M. Petrescu-Dîmboviţa during the late 30s and early 1940s; field surveys by Gh. Coman between 1950–1970; Field survey by N. Zaharia during the 1950s; Field survey by M. Oancă and M. Mamalaucă in 2013; Field survey by M. Oancă, M. Mamalaucă and A. Berzovan in 2020.

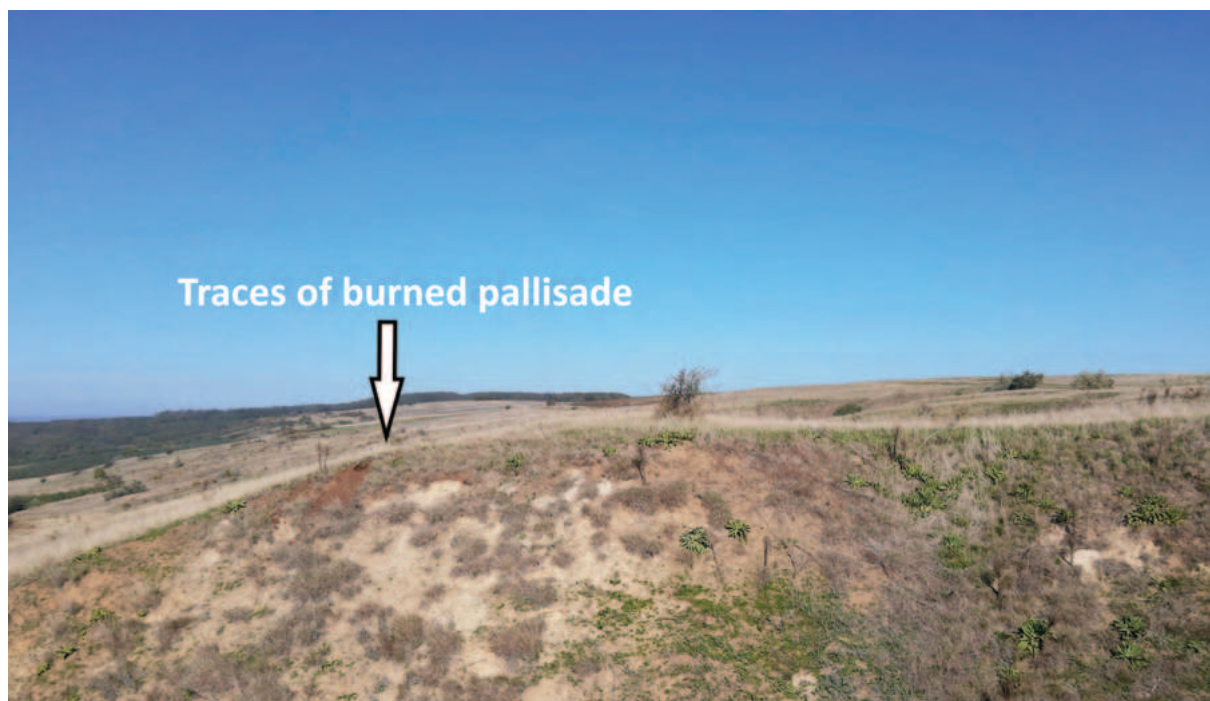


Figure 84. Măluştteni-Cetăţuia hillfort. Western part, traces of burned palisade.

C. Geographical positioning:

C. 1. From geographical point of view, the hillfort is located in the Moldavian Plateau, more precisely in the southern area of the Fălciului Hills, at the contact with the Elan – Horincea Depression. The site is located in Ciomaga massif, on a long and wide ridge, at approx. 2 km SW of Murgeni-Cetăţuia Ciomaga hillfort, in the cadastral boundary of Măluştteni commune. The objective is bordered on the east by the Ghireasca Valley, and on the east by the Monastery Valley with the Leaua Valley tributary. The absolute altitude is approx. 290–300 m, dominating with 50–60 m level difference the lower



Figure 85. Mălușteni-Cetățuia hillfort on 1:25 000 topographical map of Romania.



Figure 86. Mălușteni-Cetățuia hillfort on Google Earth satellite images.

surrounding areas. The visibility area is wide in all directions except the north, where the view is blocked by the summit of the Ciomaga Massif. The plateau where the hillforts is located is also called (not coincidentally) the “Dealul Lacului” [Lake’s Hill]. On the maps from the end of the 19th century, which we consulted, we can see the existence of a puddle area. Currently, this “lake” no longer exists, probably affected by the severe pedological drought of the last decades. It is well documented the existence of this wetland and strong springs contributed to the appearance of pronounced ravines

in the southern area (Râpa Hamza) and the western slopes of the hill (Râpa Cetățuiei), which greatly affected the objective. **C.1.a.** Currently, part of the terrain is covered by pasture, part of it by agricultural fields; **C.1.b.** The state of preservation is precarious, the site having been affected by intensive agriculture (in the east) and partially destroyed by landslides (the western part).

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 46° 11'23"N, 27° 55'12"E.

C.4. Around 290–300 m.

C.5. Around 50–60 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC. **D.2.a.:** Eneolithic (Cucuteni Culture);

D.3. Rampart with ditch.

D.4. Around 3.4–3.5 ha.

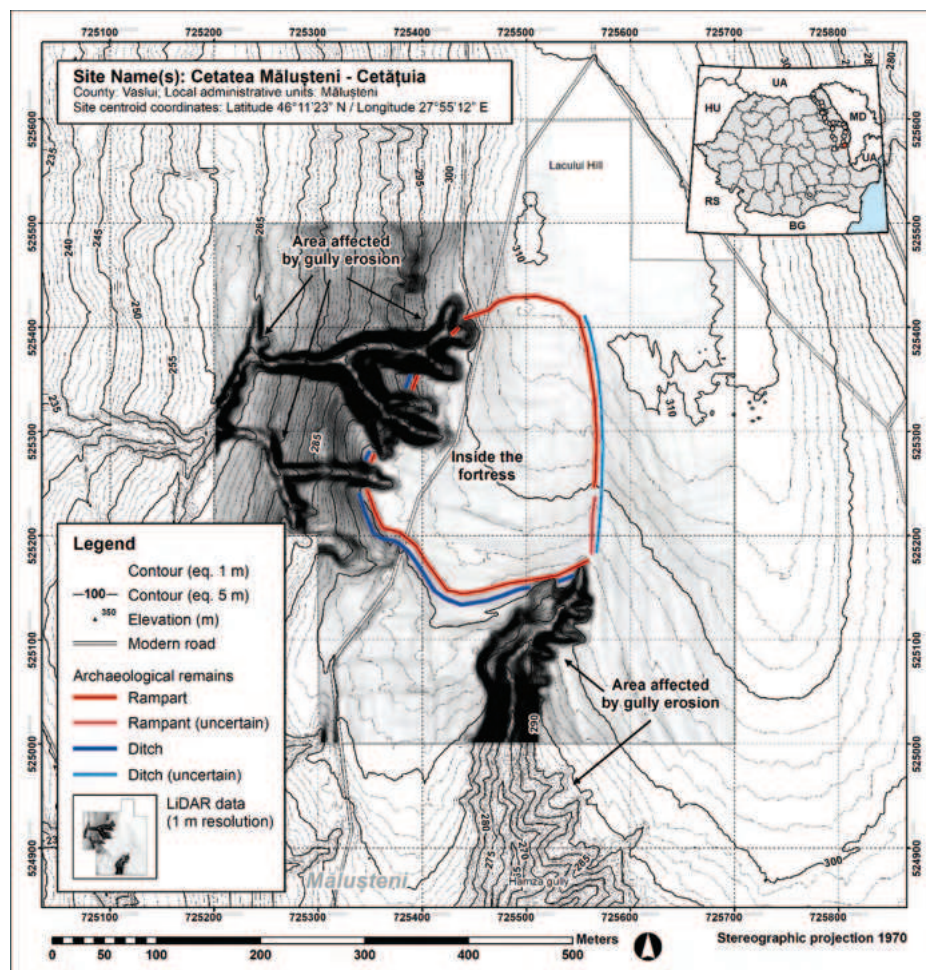


Figure 87. Mălușteni-Cetățuia hillfort. Interpretation map.

D.5. Description of the archaeological situation

The site is known in the literature for numerous discoveries belonging to the early Late Iron Age²³⁹. About the existence of a fort with rampart and ditch arranged in arch shape, we found out from two papers published by colleagues from the Republic of Moldova²⁴⁰.

²³⁹ Petrescu-Dîmbovița 1941, p. 436; Zaharia *et alii* 1970, p. 350; Coman 1980, p. 174; Teodor 1999, p. 150; Arnăut 2003, p. 234.

²⁴⁰ Zănoici 1998, p. 138–139; Haheu 2008, p. 74; It is unclear from where the two authors took this information, since the bibliography that they refer to do not mention or describe the fort (possibly Marilena Florescu).

The fortification elements (ditch and rampart) are almost completely destroyed. On the east side they are very poorly visible, as they were heavily flattened by agricultural works, their route being more or less hypothetical. Only the southern and northern sides are more visible. On the west side, on a few spurs separated by ravines, are still visible the remains of the rampart and ditch. The rampart does not seem to have been higher than 1.5 m. In one section generated by a ravine it can be seen that its upper part was burned to red, at a depth of approx. 0.6–0.8 meters, proving the palisade was destroyed through fire, maybe during a siege.

Although the contour proposed by us presents some uncertain details, we are most likely dealing with a hillfort that had an oval-elongated shape and a total surface of approx. 3.4–3.5 hectares. We notice a large amount of objects recovered from previous field surveys – including complete ceramic vessels, remains of Greek amphorae, “Scythian”-type bronze arrowheads that date the fortification between 5th–3rd centuries BC period.

E. Bibliography:

Petrescu-Dîmbovița 1941, p. 436; Zaharia *et alii* 1970, p. 350; Coman 1980, p. 174; Teodor 1999, p. 150; Turcu 2002, p. 101; Arnăuț 2003, p. 234; Zănochi 1998, p. 138–139; Haheu 2008, p. 74; Berzovan *et alii* 2020a.

III.1.22. Merești-Cetate (Vulturești commune, Suceava County)

A. Merești-Cetate / Cetățuia / Dealul Cetățuii

B. Field survey by K.A. Romstorfer in late 19th century; archaeological diggings in 1975 by D. Popovici and M. Ignat; field surveys by B. P. Niculică in 2018–2019; field survey by A. Berzovan and C. Aparaschivei in 2020.

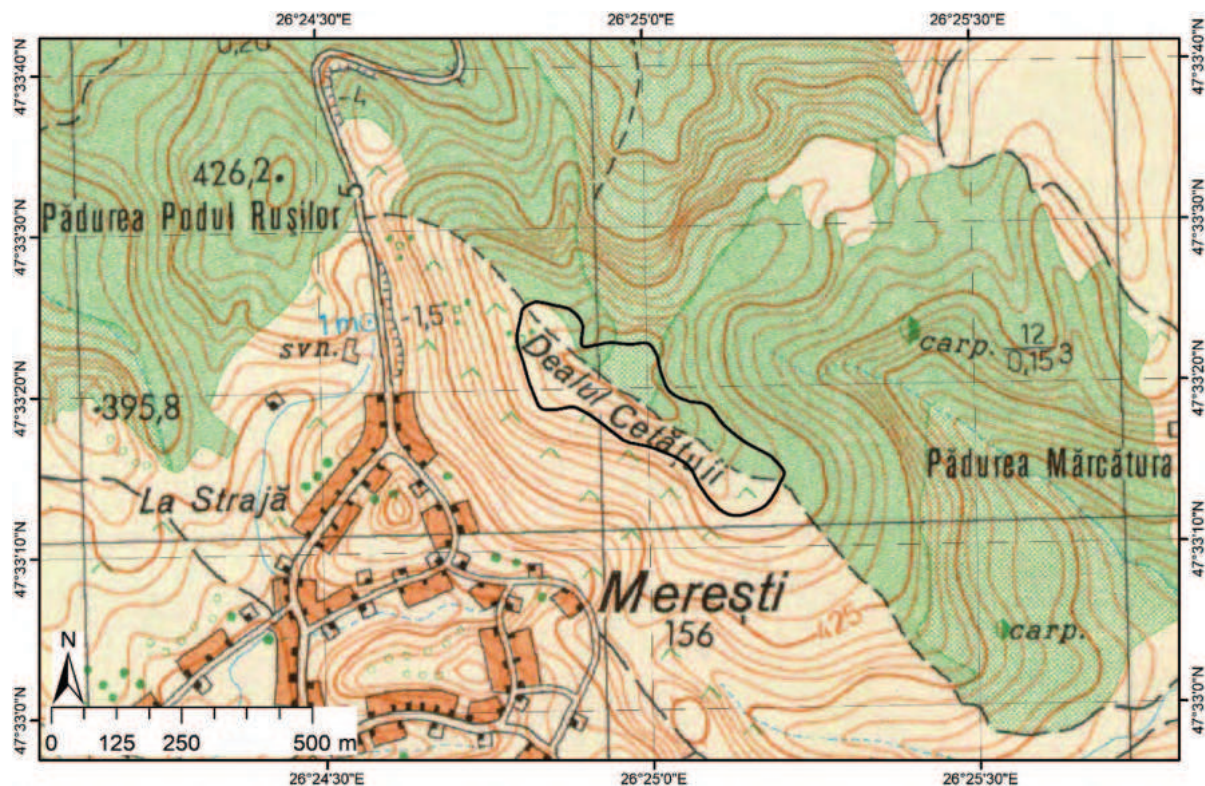


Figure 88. Merești-Cetățuia hillfort on 1:25 000 topographical map of Romania (after Niculică *et alii* 2021).

C. Geographical positioning:

C. 1. The site is located in the northern part of the Moldavian Plateau, more precisely in the Fălticeni Plateau area, being located on the hilly interfluvium that separates the Suceava river basins

from the Șomuzul Mic (both in the Siret river basin). It occupies the plateau of a prominent hill – approx. 470 m – dominating with 150–200 m the lower surrounding areas. The area of visibility is very wide, especially to the north and west. **C.1.a.** Currently, the terrain is covered by pastures and forest; **C.1.b.** The state of preservation is precarious; the hillfort is affected by numerous modern interventions.

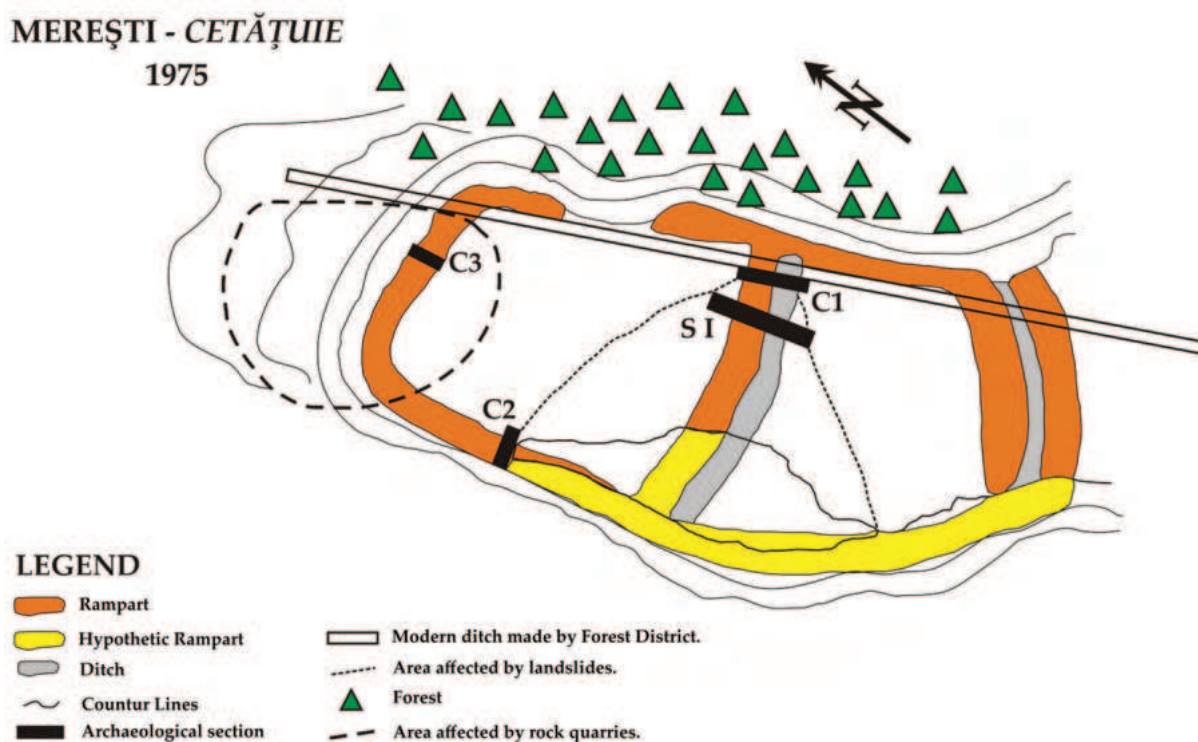


Figure 89. Merești-Cetățuie hillfort. Edited plan of D. Popovici and I. Ignat (after Niculică *et alii* 2021).

C.2. In the immediate vicinity are several springs and brooks.

C.3. 47° 33' 18" N, 26° 24' 49" E.

C.4. Approx. 470 m.

C.5. Around 150–200 m.

D. Description

D.1. Enclosed plateau; two enclosures.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. Around 2.50 ha (?).

D.5. Description of the archaeological situation

First mentions of the hillfort are to be found in late 19th century literature, more precisely in the works of D. Olinescu and K. A. Romstorfer. In 1975 archaeological excavations were made by D. Popovici and M. Ignat; the authors, after making three cassettes and one section, managed to produce a first attempt of reconstructing the hillfort's plan.

The results of our field researches brought to light a much more complicated situation, as there are problems in correlating the data from the article published by D. Popovici and M. Ignat with the situation seen in the field. In general, the situation of this hillfort is a complicated one, given the fact that the site suffered multiple damages as a result of natural hazards (landslides), but also various anthropic interventions: we mention the stone quarry in the west and southwest, and various military trenches, dating since the world wars. In this regard, we present on this occasion a series of observations that must be considered with caution, leaving future researches to clarify the situation of this site.

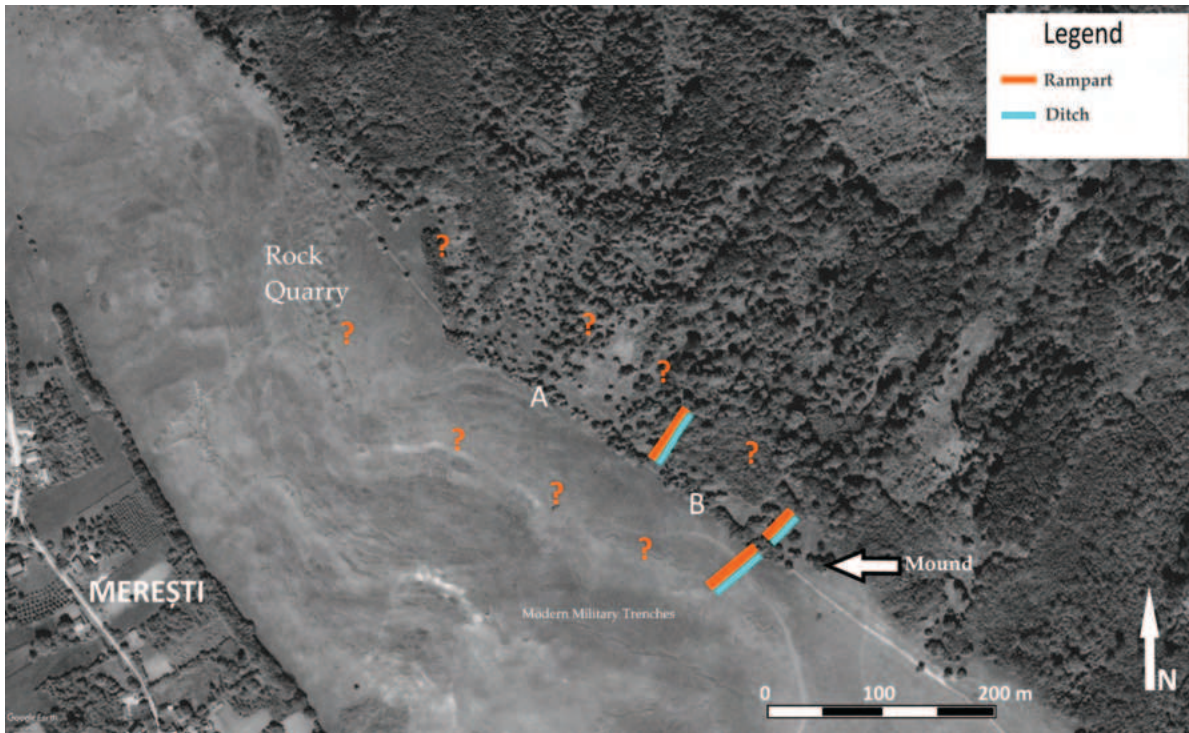


Figure 90. Merești-Cetățuie hillfort. Google Earth satellite image with the result of the field survey from 2019 (after Niculica *et alii* 2021).



Figure 91. The mound situated in the south-eastern extremity of the hillfort.

Based on the field survey we executed in the autumn of 2020, the hillfort apparently consists of two adjoining enclosures, which we conventionally name *Enclosure A* (west) and *Enclosure B* (east). Enclosure B is limited on the east by a rampart (approx. 1–1.5 m high, approx. 4–5 m at the base) oriented approximately SW-NE doubled by a not very deep ditch (approx. 0.5 m), with an opening between 3–4 m. It is crossed by the logging road. On the ground, we did not notice any convincing evidence for the existence of a second additional rampart in front of the ditch, as it appears on the plan published by the authors of the 1975 excavations. At both ends the rampart slowly disappears,

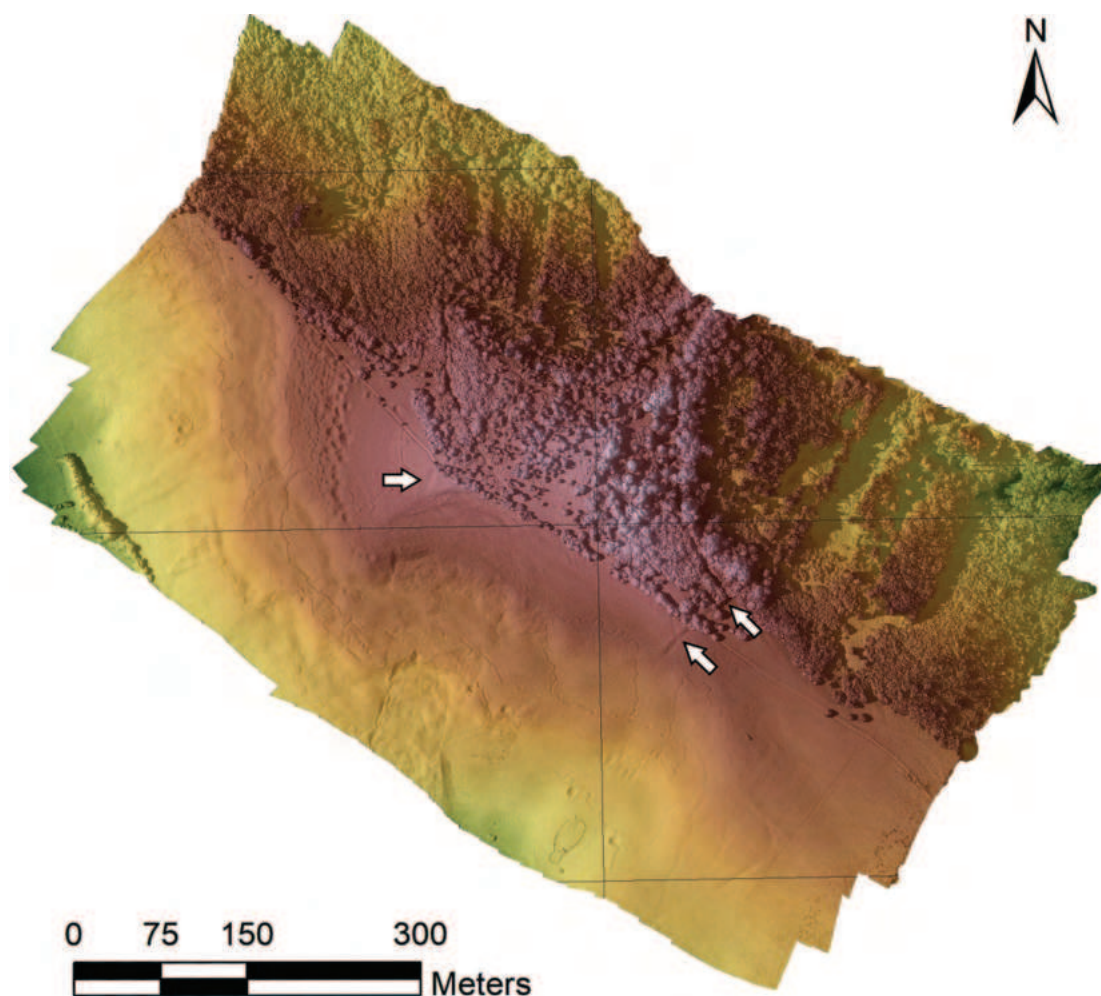


Figure 92. Merești-Cetățuia hillfort. 3D modeling of the area (after Niculică *et alii* 2021).

and no continuation is visible. The total estimated area of enclosure B is approx. 0,8–1 ha. The most significant element of fortification visible for the moment is the ditch with rampart that separates the two enclosures. Unlike our predecessors who describe it (mostly) south of the forest ditch²⁴¹, we could only notice it north of it, in the forest; it is not visible in pasture area. The rampart, oriented SV-NE, has a width at the base between 6–8 m and a current preserved height that varies between approx. 1,5–3 m. Significant amounts of burnt clay are observed on the rampart surface and on its top, probably generated as a result of wood combustion and clay superstructure (palisade). The ditch has quite large dimensions, approx. 5–6 m wide at the base, and approx. 1–1,5 m deep. The fortification elements are visible for approx. 50 m, and it disappeared without any visible continuation. The ending of enclosure A to the west is unclear, the area being severely affected by the stone quarry. Like our predecessors, we were able to notice in one of the sections resulting from sporadic excavations several traces of ash and burnt clay. However, it is not clear if these are traces of the rampart or the remains of another type of a disturbed archaeological feature. The total estimated area of enclosure A cannot exceed more than 1,5 ha. The existence of fortification elements that closed the two enclosures, to the north and south, were not visible on the surface. If on the south side the existence of the rampart – flattened and destroyed by landslides and modern interventions – is certified by archaeological excavation (trench C 2), on the north side the presence of fortification elements remains questionable for the time being, in the absence of invasive or non-invasive

²⁴¹ Popovici, Ignat 1981, p. 547, fig. 1.

research (LiDAR or geophysical scans) to attest their existence. The total cumulative surface of the two enclosures does not seem to exceed about 2.5 hectares, a value significantly lower than the 5 ha originally proposed by the authors of the excavations and retained as such by the literature²⁴². At about 50–60 m SE of the hillfort, we notice the presence of a mound of earth with a diameter of 10–15 m and a preserved height of about 1.5–2 m. It is unclear if there is the outcome of a modern (more or less recent) intervention or with the presence of a tumulus.

Regarding the land modeling, it allowed the identification of a short segment of the ditch, at the end of the western enclosure (A), but it is unclear if it belongs or not to the fortification defensive system.

E. Bibliography:

Romstorfer 1896, pp. 111–112; Romstorfer 1896a, p. 138–139; Olinescu 1894, p. 77; Popovici, Ignat 1981, p. 545–551; Zanoci 1998, p. 140; Turcu 2002, p. 104; Arnăuț 2003, p. 235, No. 298; Haheu 2008, p. 57; Măndescu 2010, p. 109, No. 415; Andronic 2021, p. 51–56; Niculică *et alii* 2021.

III.1.23. Moșna-Cetate (Iași County)

A. Moșna-Cetate / Cetățuie.

B. Field survey by N. Zaharia and A. Brătianu in 1956; archaeological excavations by A. C. Florescu and Gh. Melinte in 1966; field survey by V. Chirica and M. Tanasachi in 1983; archaeological diggings by V. Merlan, M. Văleanu and T. Marin in 2008; Field surveys by A. Berzovan 2018–2021.

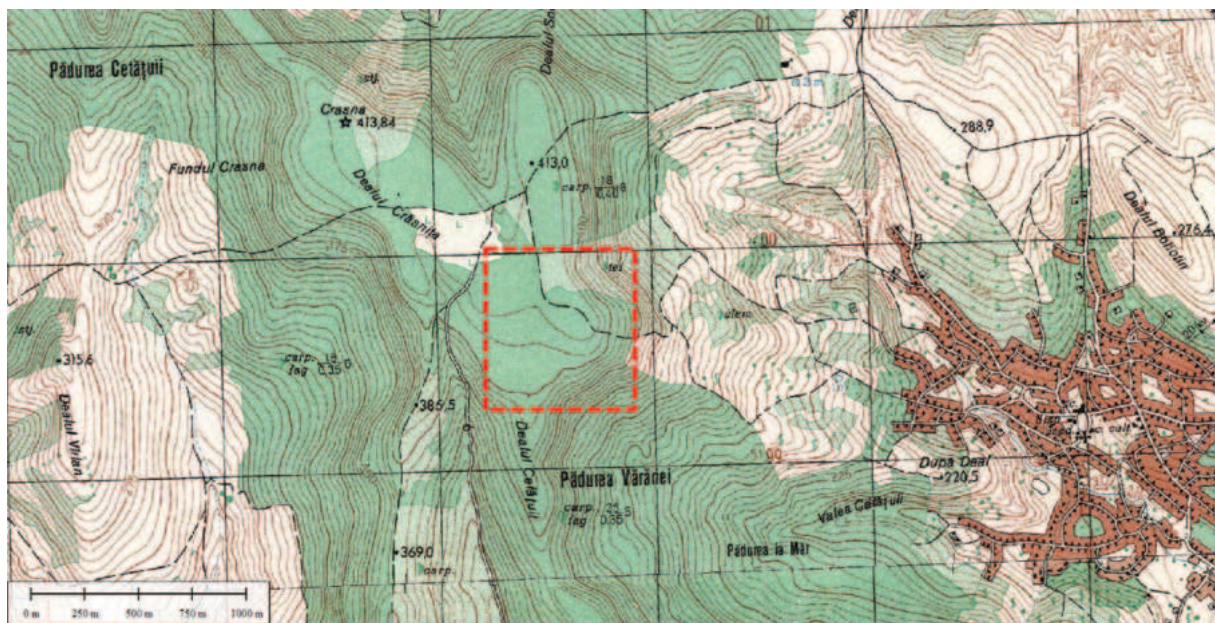


Figure 93. Moșna-Cetate hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the area of the Central Moldavian Plateau, more precisely in its eastern area. It occupies the eastern sector of the high plateau called Dealul Socilor, at the source of the Moșna valley, at an altitude between 413–420 m, dominating with approx. 200–250 m difference in level the surrounding areas lower. The site has a very good visibility to the east, along the Moșna Valley, and even towards the Prut Valley. C.1.a. Currently, the terrain is covered by forest. C.1.b. The state of preservation is good, but there are some areas affected by logging.

²⁴² Zanoci 1998, p. 140; Arnăuț 2003, p. 235, No. 298; Haheu 2008, p. 57; Măndescu 2010, p. 109, No. 415

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. $46^{\circ} 55' 36''$ N, $27^{\circ} 55' 37''$ E.

C.4. Approx. 413–420 m.

C.5. Around 200–250 m.



Figure 94. Moșna-Cetate hillfort on Google Earth satellite image.



Figure 95. Moșna-Cetate hillfort. Photo made from a nearby hill (A. Berzovan, C. Lăpușneanu).

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC. D.2.a. Paleolithic; Bronze Age (Noua Culture); Poienestî – Lucașeuca culture (late 3rd–2nd centuries BC).

D.3. Rampart with ditch.

D.4. 12 ha.

D.5. Description of the archaeological situation

The hillfort has an approximately pentagonal shape, being defended on the accessible sides by a rampart with a width of approx. 18–19 m and heights varying between 0.75–3 m, and an adjacent ditch with a depth of 3–4 m and a width of 12–15 m²⁴³. In the northern area there is visible another small trench with a rampart that closes another access path to the plateau. The total protected area was previously considered to be 9 ha²⁴⁴ but in reality, as measured on the DEM, the total surface of the fort is approx. 12 ha. In the south-eastern sector, not far from the edge of the plateau there is a massive mound, with a diameter at the base of approx. 95–100 m and a height of approx. 10 m. Inside, are visible the traces of a massive excavation made by treasure hunters. It is worth noting that somewhere around the fort, in the early 20th century, was discovered a deposit with artifacts from the Bronze Age.

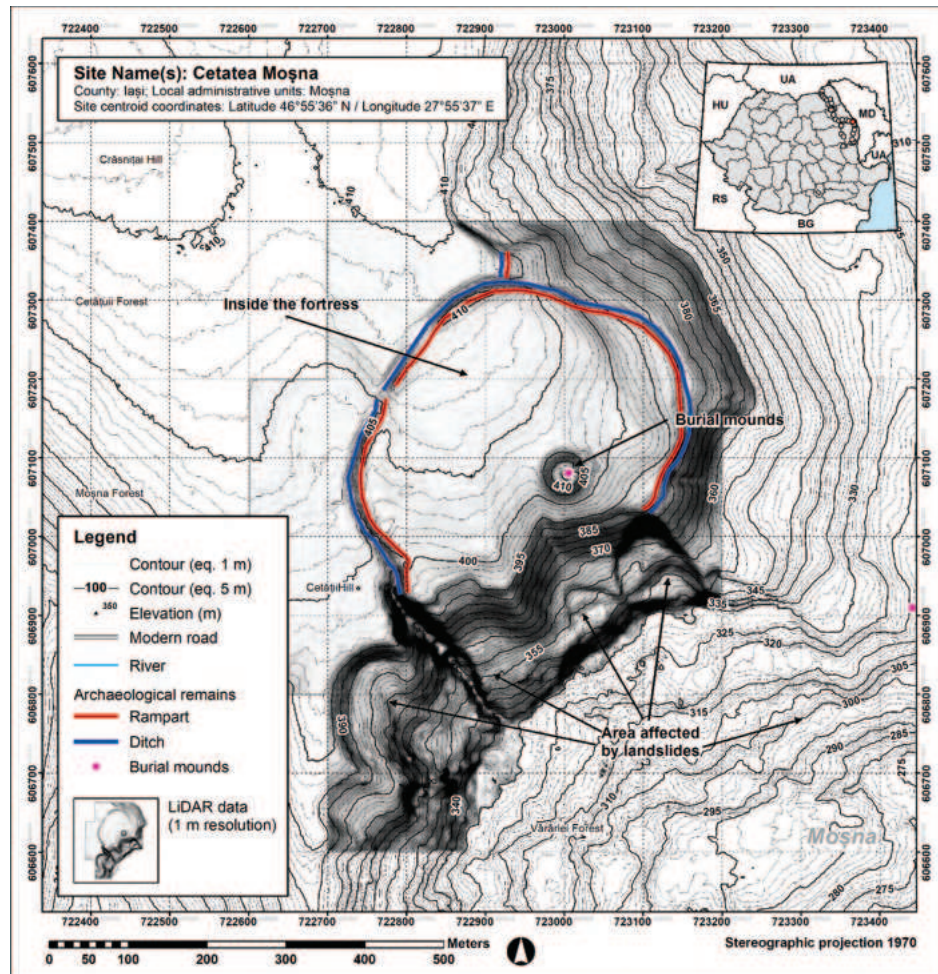


Figure 96. Moșna-Cetate hillfort. Interpretation map.

The hillfort was first surveyed by N. Zaharia and A. Brătianu in 1956, and in 1966, archaeological excavations were carried out by A. C. Florescu and Gh. Melinte²⁴⁵. These researches targeted the defensive system. According to authors, traces of dwellings from the late 3rd–2nd centuries BC were revealed, including with Poieniști-Lucașeuca fragments. The rampart has a rather simple structure, similar to the one found at Stâncești²⁴⁶. In the upper part of the rampart were seen numerous remains of burnt adobe, and red-burned soil that were interpreted by the authors as remains of some

²⁴³ Florescu, Melinte 1968, p. 130, Conovici 2000, p. 156.

²⁴⁴ Florescu, Melinte 1968, p. 129; Conovici 2000, p. 156; Turcu 2002, p. 108.

²⁴⁵ Florescu, Melinte 1968.

²⁴⁶ Florescu, Melinte 1968, p. 130.

dwellings. In our opinion these could be remnants of the burned superstructure of wood and earth that existed on top of the rampart.

In 2008, new excavations were carried out by a team composed of V. Merlan, T. Marin and M. Văleanu²⁴⁷. Among other goals, the team tried to elucidate the problem of the dating and functionality of the mound by using a rather “interesting” excavation technique, namely the deepening of the older excavations made by the treasure hunters; the action did not lead to relevant archaeological results.

The issue of the stratigraphy and chronology of this important objective, the chronological and functional relationship between the mound and the hillfort waits to be clarified by future excavations.

E. Bibliography:

Chirița 1893, p. 29, p. 30; Florescu, Melinte 1968; Conovici 2000, p. 156; Turcu 2002, p. 108; Arnăut 2003, p. 237; Măndescu 2010, Cat., p. 111; Berzovan 2019, p. 51–52; Berzovan 2019a, p. 84; Florescu 2022, p. 53–55.

III.1.24. Murgeni-Cetățuia Ciomaga (Vaslui County)

A. Murgeni-Cetățuia Ciomaga, in older literature also *Cetățuia Schineni* or *La Sturza*.

B. Field researches by C. Mateescu in 1940s; Field survey by N. Zaharia and Gh. Coman in 1957; Field surveys by Gh. Coman (1960–1980); Field survey by M. Oancă, M. Mamalaucă and A. Berzovan in 2020.



Figure 97. Murgeni-Cetățuia Ciomaga hillfort and Bârlălești-Cetățuia Foișor hillfort on 1:25 000 topographic map of Romania.

C. Geographical positioning:

C. 1. The hillfort is located in the Moldavian Plateau, more precisely in the southern part of the Fălciului Hills, at the contact with the Elan-Horincea depression. It occupies the eastern part of the Ciomaga Hills Plateau. This plateau is bordered to the north and east by steep slopes, while to the south the boundary is given by the source of the Mănăstirea valley, a tributary of the Lișcov (Elan river basin). The altitude is approx. 270–280 m, the point dominating with approx. 100–150 m level difference the surrounding areas lower. The visibility area is wide; allowing a large visibility both to

²⁴⁷ Merlan 2013, p. 6.

the north and to the south. **C.1.a.** At the time being, most of the site is occupied by the Ciomaga forest. **C.1.b.** The state of preservation is fair, the site being affected by modern roads and forest exploitation.



Figure 98. Murgeni-Cetățuia Ciomaga hillfort and nearby objectives (Google Earth).

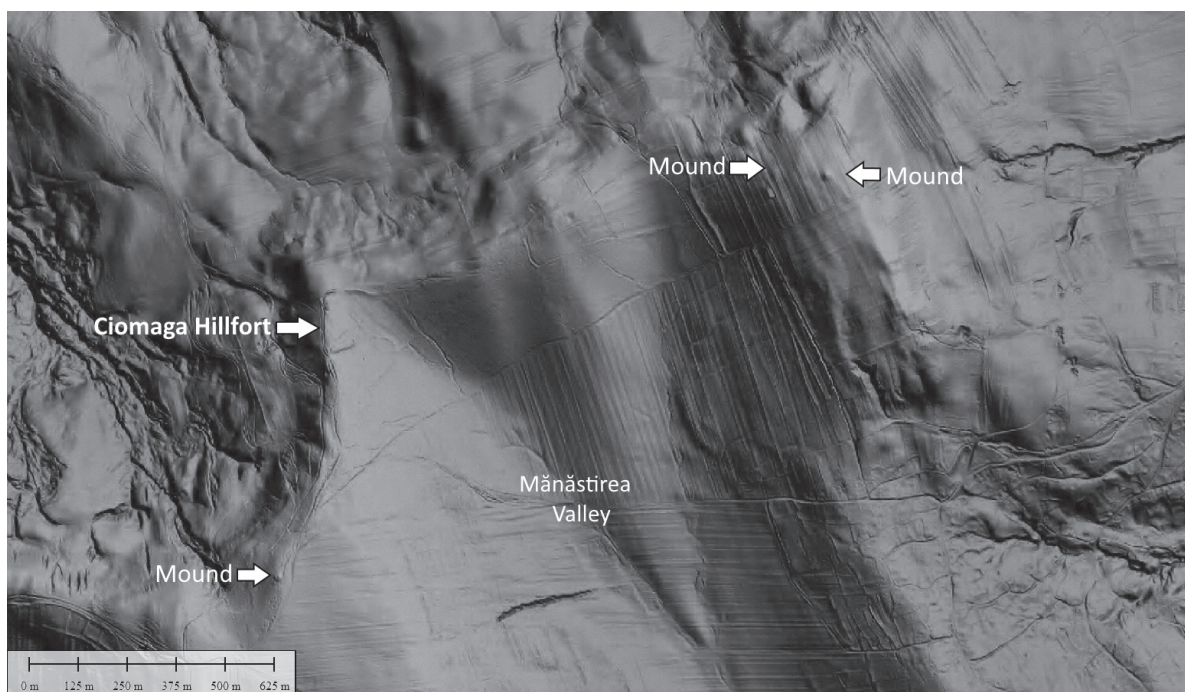


Figure 99. Murgeni-Cetățuia Ciomaga hillfort. DEM with nearby mounds / tumuli.

C.2. Near the eastern part of the hillfort is located the source of the Mănăstirea Valley.

C.3. 46° 12' 31"N, 27° 55' 38"E.

C.4. Approx. 270–280 m.

C.5. Approx. 100–150 m.

D. Description

D.1. Enclosed plateau, single enclosure.

D.2. 5th–3rd centuries BC. **D.2.a.** Eneolithic (Cucuteni Culture); Bronze Age (Noua – Sabatinovka Culture); Early Iron Age; Migration Period; Middle Ages (16th–17th centuries).

D.3. Rampart with ditch.

D.4. Around 2.7 ha.

D.5. Description of the archaeological situation

The first mentions about the existence of an archeological site in this place we found the report of C. Mateescu, where there is a mention that at the border between Ghireasca and Bârlălești. There were found several bronze “Scythian-type” arrowheads, some of them deposited in the school from Ghireasca (lost) and others at the Galați History Museum²⁴⁸. In 1957, new field research conducted by N. Zaharia and Gh. Coman took place. They mentioned a point called “*Schineni Fortress*”, a “*rectangular place reinforced with rampart and ditch*”, where many ceramic fragments were collected from the Late Iron Age, from the Eneolithic (Cucuteni culture) and the Bronze Age, finding anthropomorphic figurines, flint and “Scythian – type” bronze arrowheads, grindstones, beads and spindle whorls²⁴⁹.

Other details about this point can be found in the Archaeological Repertory of Vaslui County compiled by Gh. Coman, which renames the place “*La Sturza*” rounding it to the village of Bârlălești from Epureni commune²⁵⁰; a defensive rampart is briefly mentioned²⁵¹, then the archeological discoveries are presented, quite rich: Paleolithic, rich discoveries from the Eneolithic – Cucuteni Culture, Bronze Age – New Culture, Early and Late Iron Age, Migrations period, Medieval Period. It also mentions a mound inside the enclosure and one 100 meters away outside of it²⁵².

The analysis of DEM allowed the location of this objective, which was verified in the field in autumn 2020. The site is located at approx. 600 m southeast of the one from Bârlălești-Cetățuia Foișor, occupying the plateau of Ciomaga hill, and about 2 km from Mălușteni-Cetățuia hillfort²⁵³. The hillfort has a relative rectangular shape. The most prominent is the west side. Here the rampart has a preserved height of approx. 2 meters and a width at the base of approx. 7–8 meters. The ditch is visible on the northern side, on a distance of about 30 meters, and on the western side, on a distance of approx. 140 meters; afterwards the rampart and the ditch make a curve to the east, and the ditch is superimposed by an exploitation road; next to it there is a modern gutter delimiting the forest, with a depth of 0.40 meters. The northwest corner of the hillfort is slightly rounded, and after the rampart continues to the east approx. 35 meters; then follows an interruption, possible gate (?) with a width of approx. 10 meters, followed by another rampart segment with a ditch a length of about 150 meters. To the east, the fortification elements are more difficult to see. The field research, but also the analysis of LiDAR scans, suggests the existence of a possible rectangular “bastion”, oriented to the SE, towards the source of the Mănăstirea Valley, an area with gentle slopes, vulnerable from a military point of view. On the southern side there is visible another opening of approx. 40 meters, probably the results of modern interventions. After this, the rampart with the ditch reappears again, oriented in the NE-SW direction, making, after approx. 70 meters, the junction with the western sector. The total enclosed area is approx. 2.7 hectares.

On the occasion of the field research carried out by us we recovered representative archaeological material, both from the period of 5th–3rd centuries BC, as well as from the Eneolithic period

²⁴⁸ Mateescu 1944, p. 54.

²⁴⁹ Zaharia *et alii* 1970, p. 354.

²⁵⁰ See also Ursulescu 2014, p. 150, note 3, the professor from Iași coming to the same conclusion as us, that this point on Ciomaga Hill and “*La Sturza*” are one and the same, yet still locating them within the border of Bârlălești commune (Ursulescu 2018, p. 266).

²⁵¹ Coman 1980, p. 127.

²⁵² Coman 1980, p. 129.

²⁵³ See in this chapter, Bârlălești-Cetățuia Foișor and Mălușteni-Cetățuia.

(Cucuteni Culture). However, considering the dimensions of the rampart and the ditch, atypical for the Eneolithic fortified settlements, we choose to frame this objective during the Late Iron Age.

D.6. Observations. Related tumular necropolis

We notice the presence of a tumulus located at approx. 550 meters SW of the fortress, as well as a tumular necropolis consisting of approx. 3–4 mounds (almost all flattened), located at approx. 1 km east of this objective, on the point of maximum height of Ciomaga Hill. Of course, without archaeological excavation it is difficult to say if this site represents the necropolis of the aristocracy that once ruled the hillfort; however, we appreciate that even if they are older monuments, they could have been reused during the Late Iron Age.

E. Bibliography:

Mateescu 1944, p. 54; Zaharia *et alii* 1970, p. 354; Coman 1980, p. 127–129; Berzovan *et alii* 2020a.

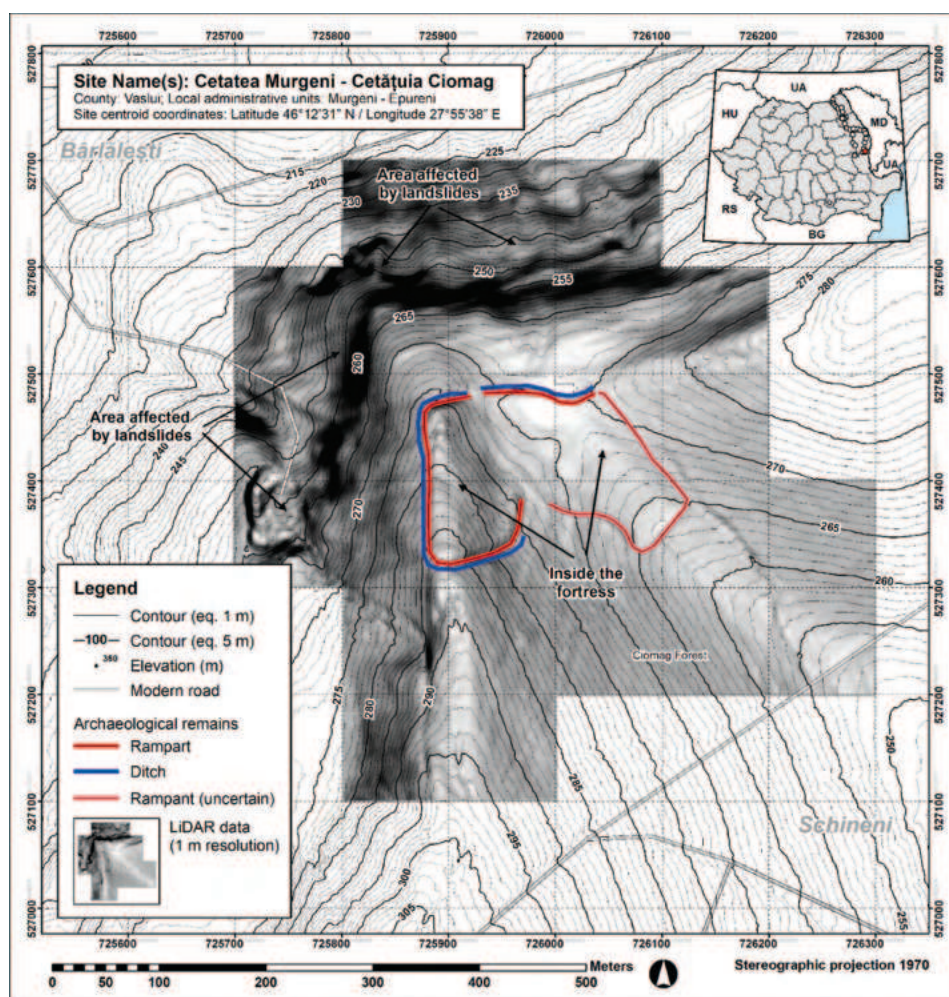


Figure 100. Murgeni-Cetățuia Ciomaga hillfort. Interpretation map.

III.1.25. Oțeleni / Bâra-Cetate (Iași / Neamț Counties)

A. Oțeleni / Bâra-Cetate / Șanțurile lui Ștefan cel Mare.

B. Field survey by A. C. Florescu and V. Ursachi in 1974; Field survey by V. Chirica and M. Tanasachi in 1983; Archaeological diggings by E. Moscalu and S. Scorțanu in 1990; field survey by R. Butnaru in 1998; researches by V. Cotiugă in 2014; field survey by V. Diaconu, A. Gafincu, S.-C. Ceașu and C. Preoteasa in 2017; Field surveys by A. Berzovan 2018–2021.

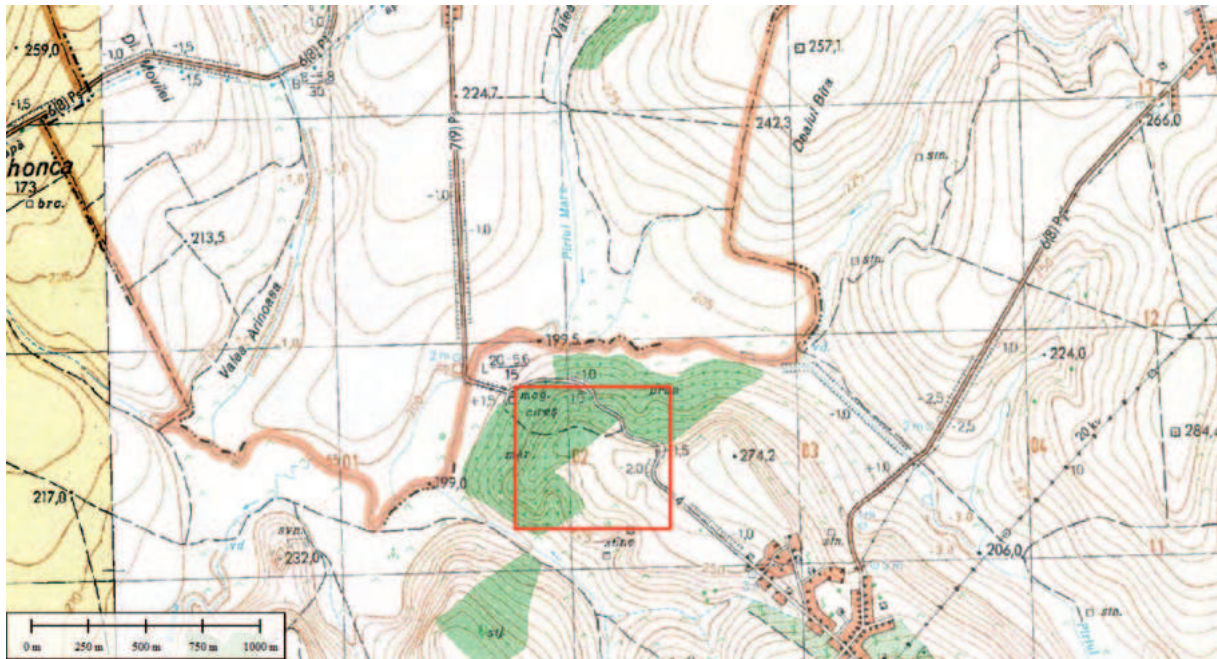


Figure 101. Oțeleni / Bâra-Cetate hillfort on 1:25 000 topographical map of Romania. At this time, the fort was located entirely in the Bâra commune in Neamț County.

C. Geographical positioning:

C. 1. Geographically, the site is located in the northwestern part of the Central Moldavian Plateau. It occupies the northwestern promontory of Bulgăria Hill, also called Cetății Hill, at a total altitude of approx. 250 m, dominating with approx. 50–60 m difference in level the surrounding areas lower. The plateau is bordered to the NE by the Albuia brook valley and to the SW by the Brăileanu Valley from the Siret river basin. **C.1.a.** Currently, the terrain is covered by agricultural fields and pastures; **C.1.b.** The state of preservation is precarious, there are areas affected by intensive agriculture.

C.2. The closest water-sources are the Albuia and Brăileanu valley, both located a few hundred meters in distance.

C.3. 47° 02' 14" N, 27° 01' 42" E.

C.4. Approx. 250 m.

C.5. Around 50–60 m.

D. Description

D.1. Enclosed plateau; three enclosures.

D.2. 5th–3rd centuries BC. **D.2.a.** 2nd–4th century AD; Middle Ages.

D.3. Ramparts with ditches.

D.4. 11 ha.

D.5. Description of the archaeological situation

This hillfort was the subject of some confusions regarding its location, some authors locating it in the cadastral border of the commune Oțeleni, in Iași County²⁵⁴, others in the border of the Bâra commune, in Neamț County²⁵⁵. The oscillation of the cadastral boundary over time may have contributed to this state of affairs. In the absence of necessary clarifications, confusion was generated, perpetuated as such in historiography, and some authors, taking this information, even talked about two distinct hillforts²⁵⁶.

²⁵⁴ RAJ Iași II 1985, p. 295.

²⁵⁵ Dumitroaia 1992, p. 287.

²⁵⁶ Zanoci 1998, p. 118 and p. 143; Arnăut 2003, p. 185 and p. 243; Haheu 2008, p. 66 and p. 77.

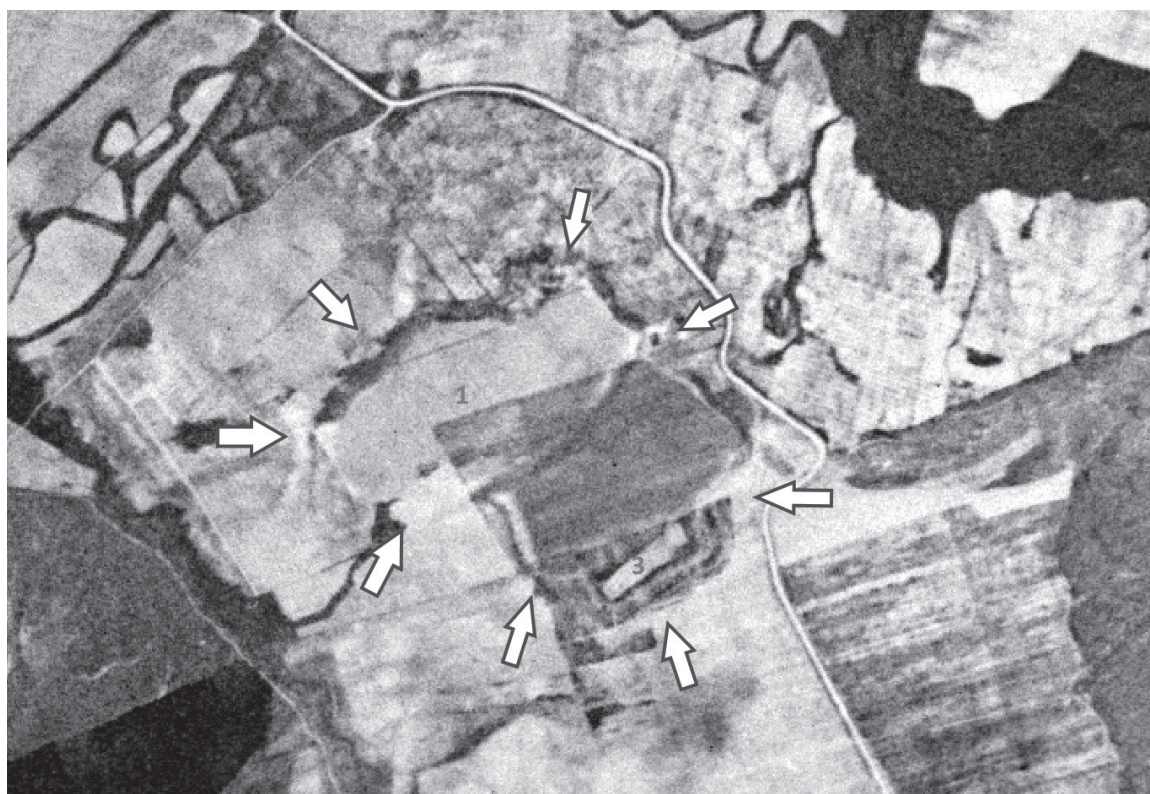


Figure 102. Oțeleni / Bâra-Cetate hillfort on Corona satellite images from 1964 (after <https://earthexplorer.usgs.gov>). The three enclosures are clearly visible.

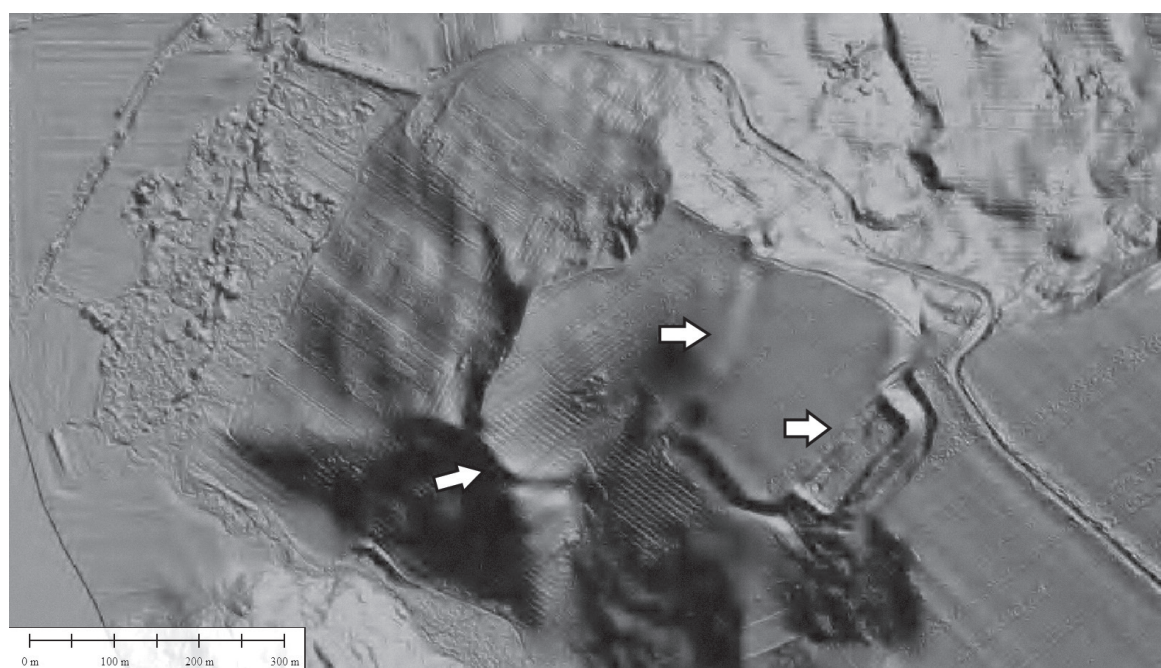


Figure 103. Oțeleni / Bâra-Cetate hillfort on DEM.

Known more due to repeated field surveys, the hillfort was excavated in 1990. During these researches from 1990, led by E. Moscalu and S. Scortănu, two archaeological trenches were made, of 15×1 m. Unfortunately, we do not know their exact position. A dwelling with a hearth was uncovered, an exterior hearth as well as a housekeeping pit. Ceramic fragments and other categories of objects from the 5th–3rd centuries BC period were uncovered. The results of these researches remained unpublished.

In the year 2014 new investigations were made in the area, as part of a collaboration protocol between the “Geto – Dacii Cultural Asociation” led by the controversial journalist D. Roxin²⁵⁷ and the Alexandru Ioan Cuza University of Iași represented by V. Cotiugă. Five of “Romania’s most famous metal detectorists” were coopted in the project to scan and “eliminate” all metal objects up to a depth of -0,25 m in the area of the third enclosure, that was to be subjected to a geomagnetic survey. On this occasion, few metallic objects the 5th and 3rd centuries BC were discovered²⁵⁸, pottery, as well as various artifacts from later historical times²⁵⁹. The results were not published in a scientific paper.

The hillfort itself presents a complex plan, suggesting at first sight several functional stages, unfortunately impossible to delimit precisely in the absence of excavation. There are obviously three enclosures: (1) delineated to the east and north by the edge of the plateau, to the south by a visible rampart and ditch and towards west by a flattened rampart and ditch, that also marks the boundary with enclosure no. 2. Second enclosure (2) was fortified and defended on all sides, even on the edge of the plateau.

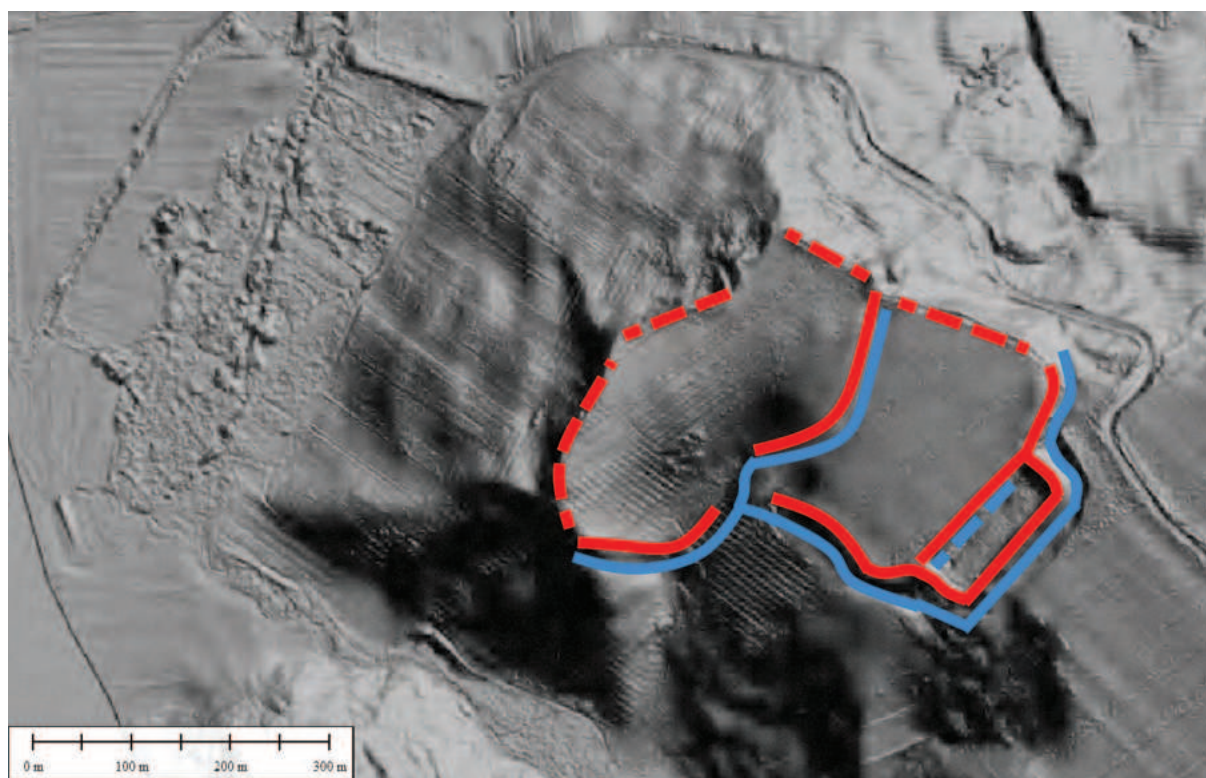


Figure 104. Oțeleni / Bâra-Cetate hillfort. Interpretation map. With red: ramparts; blue: ditches. With broken line, unclear areas.

The most prominent on field is the third enclosure (3), of an elongated rectangular shape with slightly rounded corners. Here the ramparts are very visible on field, reaching a height of approx. 7 m, the ditches are also very prominent. It cannot be excluded that this distinct sector represents a medieval or modern reuse²⁶⁰. On the other hand, we cannot neglect the hypothesis that this third

²⁵⁷ Măndescu 2013, p. 9–15; Berzovan 2013, p. 28–29.

²⁵⁸ Including a bronze link, specific to the Late Iron Age, interpreted by the finders as a “3000 year old premonetary sign” (see links below).

²⁵⁹ See <https://www.adevaruldespredaci.ro/am-nceput-primul-santier-arheologic-la-oteleni-iasi/> (accessed on 1.02.2022); See also *Arheologi și detectoriști. Șantierul arheologic de la Oțeleni, Iași*, <https://www.youtube.com/watch?v=12JVEBOSZgc&t=2194s> (accessed on 1.02.2022). According to what we can see in the video, the objects are dug out from the ground without using any cassettes.

²⁶⁰ In older bibliography, a “pre-feudal” origin was suggested, but no arguments were given, see Florescu 2022, p. 45–46.

enclosure could represent a “bastion” of the Iron Age fortress, similar to the ones we encounter at some contemporary fortifications in the Prut-Dniester area. The lack of historical sources for the existence of a medieval fort²⁶¹ here could give more credit to this hypothesis. Furthermore, the idea that the Middle Age/ Modern period, builders would have attached themselves to the Iron Age fortress, and constrained by the shape of the latter, would have built an attached elongated rectangular redoubt, raises more than just a few question marks. Future archaeological research can bring to light more data, confirming or infirming the above hypothesis.

As for the archaeological artifacts discovered inside the hillfort, they consist mainly of hand-crafted local pottery, sporadic fragments of Greek amphorae (impossible to determine), and “Scythian-type” bronze arrowheads discovered over time. A large part of the artifacts ended in the school collection from Oțeleni.

E. Bibliography:

RAJ Iași II 1985, p. 295; Dumitroaia 1992, p. 287; Turcu 2002, p. 19; Gafincu *et alii* 2018, p. 123–124; Berzovan 2019, p. 47–48; Berzovan 2019a, p. 79–80; Florescu 2022, p. 45–46.

III.1.26. Poiana cu Cetate-Cetate (Grajduri commune, Iași County)

A. Poiana cu Cetate-Cetate.

B. Field survey by V. Chirica and M. Tanasachi in 1983; field survey by A. Berzovan in 2018.



Figure 105. Poiana cu Cetate-Cetate hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the area of the Central Moldavian Plateau, more precise on the southern part of the Iasi Coast. It occupies a promontory defended on three sides by steep slopes; it has a length of approx. 125 m and a width approx. 50–55 m, being situated near the springs of the Cutigna brook from the Bârlad basin. It is located at an altitude of approx. 335–340 m, dominating with about 30–40 m the lower surrounding areas. The northern part, the only one easily accessible from military point of view, is where the defensive system is located. **C.1.a.** Currently, the terrain is covered by forest; **C.1.b.** The state of preservation is good, but there are some areas affected by logging.

²⁶¹ Information offered to us by Costică Asăvoaie (Moldova National Museum Complex Iași) and dr. Cătălin Hriban (Institute of Archaeology Iași).

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 46° 59' 43" N, 27° 35' 38" E.

C.4. Approx. 335–340 m.

C.5. Around 40–40 m.



Figure 106. Poiana cu Cetate-Cetate hillfort. Google Earth satellite image.

D. Description

D.1. Enclosed promontory; single enclosure.

D.2. 4th–3rd centuries BC (uncertain); D.2.a. Eneolithic (Cucuteni Culture); Middle Ages.

D.3. Rampart with ditch.

D.4. 0.50 ha.

D.5. Description of the archaeological situation

The rampart has a width of 17–18 m and a current height of around 3–4 m; the ditch has an opening of approx. 20 m. Within the fortress, immediately behind the rampart, is visible a massive depression with a diameter of around 15 m, which could be either a pit dug by treasure hunters in previous times, or a crater resulting from the explosion of a large caliber shell.

The site raises numerous problems in regard to its chronological attribution. The archaeological surveys carried out by us and by our predecessors²⁶² has led to the recovery of a rich archaeological material. It belongs in overwhelming proportion to the Cucuteni culture's A3 phase, but there are also fragments from the 4th–3rd centuries BC and few from the medieval period. Since there are no ramparts and ditches of such magnitude documented so far in the Eneolithic period, it seems that the fort belongs to either the Iron Age or the Middle Ages. At first glance, the framing of this fortress to the Medieval Period would seem more plausible, since a historical document issued on 8 October 1462 refers to a point "*Muncel, where used to be the fort of Duma Negru*"²⁶³, however, the subsequent documents make it clear that it is not a "fort" in discussion but a simple placename. The use of this fort as a 15th century boyar residence should have left more consistent archaeological traces of a much different kind than those we see on terrain²⁶⁴.

²⁶² RAJ Iași I 1984, p. 159.

²⁶³ DRH, A, II, p. 161.

²⁶⁴ See the more detailed discussion in Apetrei 2009, p. 250–251.

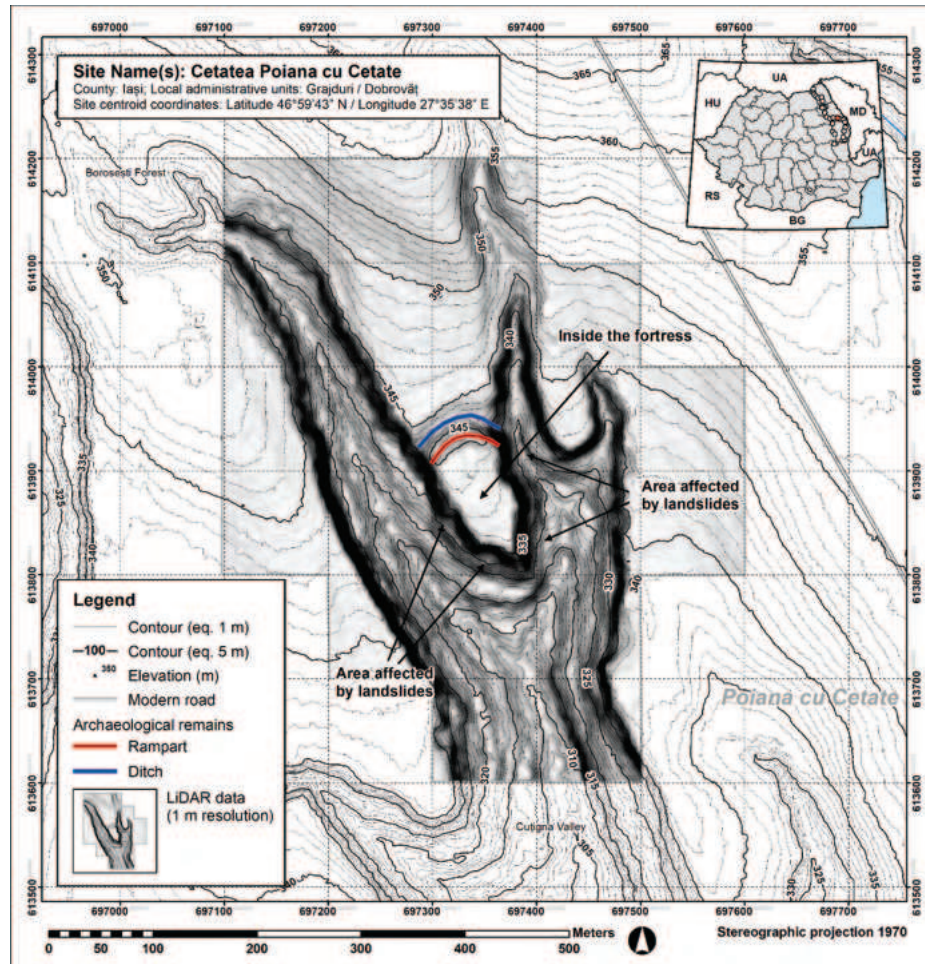


Figure 107. Poiana cu Cetate-Cetate hillfort. Interpretation map.

Even though the attribution of this fortification to the early period of the Late Iron Age appears to us more likely, we consider that archaeological excavations are necessary in order to fully clarify the cultural attribution and chronology, thus the data we presented must be taken with *necessary precautions*.

E. Bibliography:

RAJ Iași I 1984, p. 159; Apetrei 2009, p. 250–251; Berzovan 2019, p. 50; Berzovan 2019a, p. 82–83.

III.1.27. Poiana Mănăstirii-Între Șanțuri (Țibana commune, Iași County)

A. Poiana Mănăstirii – Între Șanțuri.

B. Field researches in the second half of the 19th century; field surveys by professor Constantin Alexa in the 1980s; field survey by V. Chirica, R. Popovici and M. Vrabie in 1982; field survey by A. Berzovan, S. Honcu, A. Honcu and C. Cozma in 2013; field surveys by A. Berzovan and G. Bosie in 2014–2017; magnetometric survey by C. Mischka and I. Tasimova in 2017; test-trenches by S. Enea, A. Berzovan and D. Boghian in 2017.

C. Geographical positioning

C.1. From geographical point of view, the site is located in the area of the Central Moldavian Plateau, on the edge of a wide, high plateau, located on the interfluvium delimited to the west by the Sacovăț valley basin (tributary of Bârlad) and east by the valley of Ușița brook (tributary of the river Stăvnic, from the Bârlad basin). The plateau, having an absolute altitude of approx. 410–420 m dominates the lower surrounding areas with almost 300 m level difference. The viewshed of the

hillfort is extensive, especially towards West and South-West. **C.1.a.** At this moment, most of the enclosed area is used for agriculture (the western side), with some patches of forest and pastures. **C.1.b.** The state of preservation is precarious; due to extensive deforestations in the 1980s, most of the south-eastern part of the hillfort was affected by a massive, still active landslide; the interior is affected by intensive agriculture, while the northern rampart area by the presence of modern roads and erosion. This site suffered extensive damage in the last 40 years.

C.2. A number of springs are to be found beyond the eastern limits of the hillfort.

C.3. 47° 00' 12"N, 27° 21' 47"E.

C.4. 410–420 m.

C.5. Around 300 m.

D. Description

D.1. Enclosed plateau; one (?) enclosure with a southern “bastion” (?).

D.2. 4th–3rd centuries BC; **D.2.a.** Eneolithic (Cucuteni Culture); late 3rd–2nd centuries BC (Poienestii – Lucașeuca Culture).

D.3. Earth rampart with adjacent ditch.

D.4. Around 15 ha.

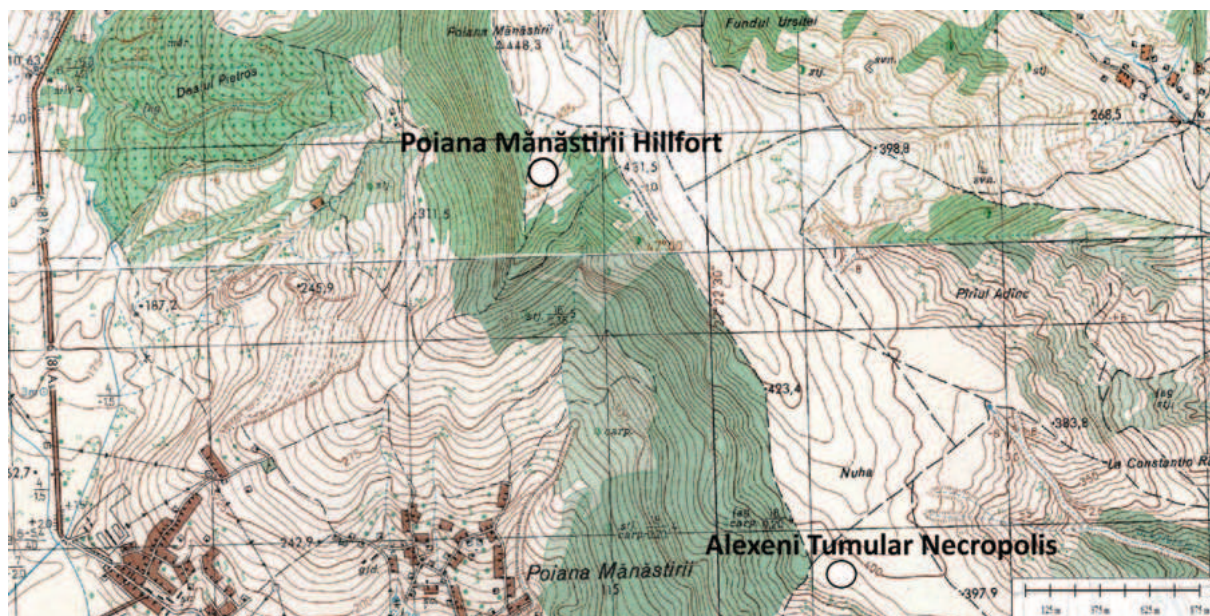


Figure 108. Poiana Mănăstirii-Între Șanțuri hillfort and the tumular necropolis of Alexeni on 1:25 000 topographical map of Romania.

D.5. Description of archaeological situation

The ramparts and ditches from the forest located to the North-East of Țibana have attracted the attention of the locals since the end of the 19th century²⁶⁵. The hillfort has an elongated shape with a maximum length of 800 m and a maximum width of 400 meters, covering a surface of around 15

²⁶⁵ See the discussion in RAJ Iași II 1985, p. 424; Berzovan 2016, p. 216. We know that the ramparts and ditches in the forest northeast of Țibana attracted the attention of locals since the end of the 19th century, being mentioned as such since Odobescu's *Questionnaire*. Pamfil Polonic mentions ramparts at Poiana de Sus (RAJ Iași II 1985, p. 425), not being clear whether it is an echo of the hillfort from Poiana Mănăstirii or another distinct point. In the *Great Geographical Dictionary of Romania*, vol. 5 (Lahovari 1902, p. 504), we talk about “Dealul Șanțurilor” [The Hill of the Ditches], which would take its name from some ditches, “about which the elders say that they served as defense in times of wars”. Not far from the ditches are two large mounds called “Movilele Căprarului” [The Goat Herders Mounds], this last phrase probably referring to the tumular necropolis from Alexeni-La Faur. At that time, it was considered that the defensive elements were related to the “Great Road”, which connected Iași and the Lower Lands of the Moldavian Principality in the Middle Ages.

ha. Unfortunately, due to the massive landslides affecting especially the southern part, an accurate reconstruction of its original shape cannot be done²⁶⁶.

In its southern part there is visible a secondary line of defense; could have been maybe a part of a second enclosure or maybe a bastion (?); unfortunately, the degree of preservation in this area does not allow us to make a detailed discussion.

Regarding the visible dimensions of the rampart, it has a width of approx. 10–15 meters at the base (especially in the northern sector, that is much better preserved), respectively approx. 2–3 meters on the canopy, its height ranging between 1.5 and 4.5 meters. In the northern part, the ditch has a depth of approx. 1.5–2 m and a width of 5–7 meters. In the rupture zones of the rampart there are many burnt adobe and red burnt earth from the wooden superstructure; some of the adobe keep the imprints of the wooden poles. From some of the imprints, we were able to estimate the diameters of these wooden poles at approx. 30–35 cm thick.

Interesting data was also provided by the magnetometric prospections made by Carsten Mischka and Imren Tasimova from the Friedrich-Alexander-Universität of Erlangen (Germany) in August 2017. On the scanned strip in the central-western area of the enclosure were identified the traces of two large anomalies, interpreted as the remnants of burned structures – confirmed by our test trench – while in the eastern part other sporadic anomalies appeared, possibly pits and dwelling features. The density of the features is not very high; in fact, there are vast areas almost completely void of archaeological traces.

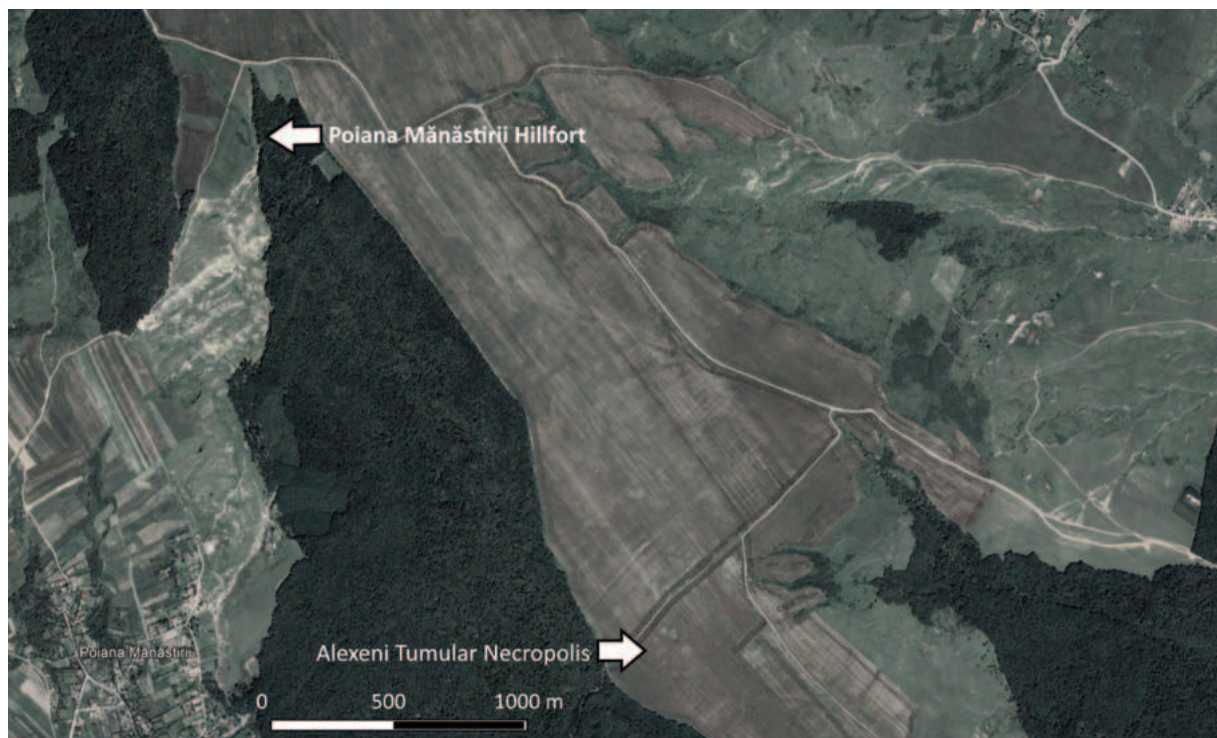


Figure 109. Poiana Mănăstirii-Între Șanțuri hillfort and the tumular necropolis of Alexeni (Google Earth).

During the test diggings in 2017, two control trenches were carried out: SC 1/2017, in the scanned central western area and SC 2/2017, in the NNV part of the fortress, where there was probably an access gate cut off by a modern road. SC 1 (10 × 2 m) was drawn in order to specify the characteristics of one of the magnetometric anomalies indicating the presence of a house burned (*L 1*). What

²⁶⁶ Thus, the reader who will focus on the study we published in 2016 (Berzovan 2016), but also on the 2017 report (Berzovan *et alii.* 2017) will notice some differences in the proposed plans and reconstructions, depending on the technical means which we had at our disposal (for ex. in 2016 we did not yet have access to LiDAR scans and our reconstruction was based solely on a field survey).

appeared to be a massive burning structure on the magnetogram, turned out, after researches, to be numerous debris, with traces of beams and twigs, from the remains of a destroyed surface house, affected maybe by plowing. The ceramic fragments discovered were just a few, belonging to fragments of hand modeled vessels, strongly corroded and rolled, adorned with embossed alveolar belts and hooks²⁶⁷.

Trench SC 2 (22 × 1.5 m) was open where the rampart was pierced by the country road. For objective reasons, the trench could not be extended towards the defense ditch. The rampart has a fairly simple structure, being built with earth extracted from the ditch, superimposed by a wooden superstructure (palisade) covered with clay²⁶⁸.

The materials recovered during the field research carried out by us and our predecessors are quite rich. They consist of local ceramic fragments, worked almost entirely by hand and fragments of imported Hellenistic amphorae, some metal objects and a glass pearl. The amphorae come from several centers: Rhodes, Chios, Sinope, Thasos, Heraclea Pontica²⁶⁹. The diversity of Greek amphorae is significant. Thus, even if the hillfort was not densely inhabited, apparently it could have been an economic center or center of distribution for nearby communities.

	500–450	450–400	400–350	350–300	300–250	250–200
Rhodos Amphorae						
Chios Amphorae						
Sinopean Amphorae						
Thasos Amphorae						
Heracleean Amphorae						

Table 2. The relative chronology of the Poiana Mănăstirii hillfort reflected in the discovered amphorae (all dates BC)

Regarding the chronology of the finds, an analysis of the amphorae discovered so far (see Table above) suggest a general dating between the 4th–3rd century BC.

It is interesting to note the presence of ceramic fragments of the Poienești – Lucașeuca type in the materials recovered during the field research. These seem to suggest a later (sporadic?) habitation after 220 BC; it is not excluded that the destruction of the hillfort took place on the occasion of the arrival in the area of the bearers of this culture.

D.6. Observations. Related tumular necropolis

Of particular interest are the tumuli situated in the Alexeni village, named “La Faur”, located at approx. 2 km away from the fortress. In the literature there were mentioned three mounds, of which two were interlaced, with pottery fragments typical to the 4th–3rd century BC present in their destroyed mantle. However, the LiDAR gives us the image of a possibly larger and more complex tumular necropolis with approx. 8–9 mounds, most of them flattened by agriculture. Their layout reminds us of the well-known Iron Age aristocratic necropolis of Cucuteni-Dealul Gosan²⁷⁰. It is possible that the necropolis of the Poiana Mănăstirii fort’s aristocracy was located here. It remains for further archaeological investigations to confirm or infirm this hypothesis.

E. Bibliography:

Lahovari 1902, p. 504; RAJ Iași II 1985, p. 424; Turcu 2002, p. 129; Arnăuț 2003, p. 248; Berzovan 2016; Berzovan *et alii* 2017; Berzovan 2019, p. 48–49; Berzovan 2019a, p. 81–82; Berzovan *et alii* 2020b.

²⁶⁷ Berzovan *et alii* 2017, p. 315.

²⁶⁸ RAJ Iași I 1984, p. 112–113, Dinu *et alii* 1984.

²⁶⁹ See the discussion in Berzovan *et alii* 2020b, also Berzovan 2016, p. 220–221.

²⁷⁰ RAJ Iași I 1984, p. 112–113, Dinu *et alii* 1984.

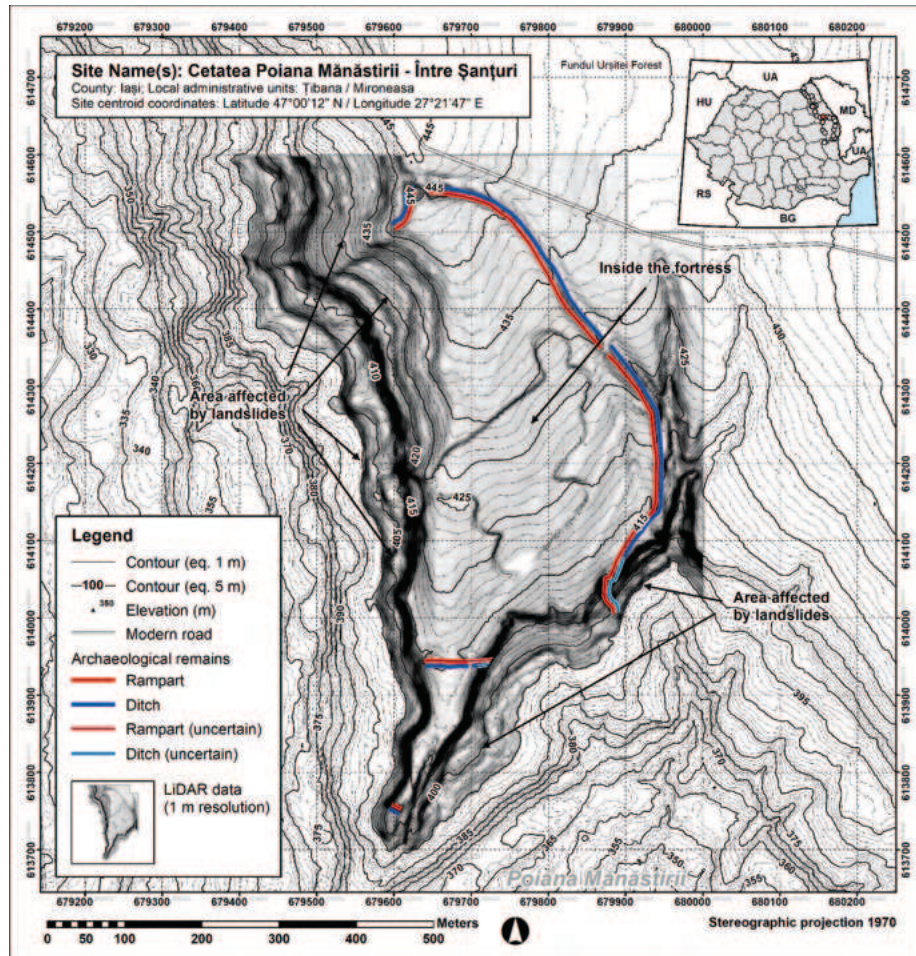


Figure 110. Poiana Mănăstirii-Între Șanțuri hillfort. Interpretation map.

III.1.28. Scobinți-Basaraba (Iași County)

A. Scobinți – Basaraba.

B. Field survey by A. C. Florescu and M. Florescu during 1970–1980; Field survey by A. Berzovan during 2016 –2020.



Figure 111. Scobinți-Basaraba hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. From geographical point of view, the site is located in the northern part of the Moldavian Plateau, more precise in the eastern branch of the Dealul Mare massif, at the contact with the lower area of the Jijia Plain. It occupies the southern slopes of the Basaraba hill, at altitudes between 365–335 m, dominating with about 50–70 m in level the lower surrounding areas. The viewshed is limited towards north due to higher heights, but is much more generous towards south; there is visible the A Enclosure of the Cotnari-Cătălina hillfort. **C.1.a.** Currently, the terrain is used as pasture, orchard, gardens, being partially covered by modern constructions; **C.1.b.** The state of preservation is precarious.

C.2. In the vicinity are a number of springs and brooks.

C.3. 47° 23' 58" N, 26° 53' 11" E.

C.4. Approx. 365–335 m.

C.5. Around 50–70 m.

D. Description

D.1. Hill-slope fort; single enclosure.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. Around 2.79 ha.



Figure 112. Scobinti-Basaraba hillfort. The southern ditch. Large part of the ditches traverses the gardens of the local people.

D.5. Description of the archaeological situation

The site was discovered as a result of field research conducted by A. Florescu and M. Florescu²⁷¹, probably sometime after 1978, because the manuscript discovered in the archives of the Institute of Archeology in Iasi²⁷² that we published recently *does not mention it*. A description of the objective is found in the work of A. Zanoci, where he mentions: “the settlement is located on a high plateau,

²⁷¹ Florescu 1980, p. 14; Teodor 1999, p. 175.

²⁷² See Florescu 2022, *passim*.

reinforced from the east, south and northeast by a rampart”²⁷³; the source of the information remains unknown, as the two bibliographic titles mentioned by the author from Chişinău do not describe it. An equally confusing description we also found in the works of T. Arnăuț, where we find out that the site is located on a plateau belonging to the Basaraba hill, its northern slopes leading to the inferior terrace of a river. Arnăuț mentioned further that N. Zaharia made researches in the area, and that the fortified complex consists of two “conjoined forts”, in which early Late Iron Age materials were found²⁷⁴. Again, the sources of the information used by T. Arnăuț remain unclear. Most likely that the two authors from the Republic of Moldova took their information either from Marilena Florescu or from one of the unpublished manuscripts left by A. C. Florescu and subsequently lost.



Figure 113. Scobinți-Basaraba hillfort. The eastern ditch.

Starting from this confusing data, during 2016–2017, we tried to identify this site on the field. Despite our insistence, we were unable to locate it at that time. However, taking into account the seriousness and meticulousness of A. C. Florescu, unlikely to confuse a natural phenomenon with a hillfort, we considered then that most likely the fort could have been destroyed by subsequent landslides²⁷⁵.

After 2018, with the results of LiDAR scans, but also based on the information received from some locals²⁷⁶, we managed to eventually identify what Florescu saw on the ground more than 40 years ago. The site is located on a slight slope, the defensive system consisting of a rampart (or rather scarp) with a defensive ditch; it is visible on the south and east side; on the west side it was currently destroyed by the planting of an orchard, but is visible on a series of older aerial images; the northern closure remains more or less hypothetical.

The relative strange aspect of the site raises questions concerning its nature, asking the question if there is the result of a natural hazard, flowing of torrents on the slopes, or what we see is the result of anthropogenic actions. From our point of view, there are multiple arguments in favor of the idea that what is visible on the field surface is not a natural hazard:

²⁷³ Zanoci 1998, p. 151.

²⁷⁴ Arnăuț 2003, p. 260.

²⁷⁵ Berzovan 2017, p. 68.

²⁷⁶ We offer thanks to professor Ioan Mușei for the precious informations received.



Figure 114. Scobinți-Basaraba hillfort. Corona satellite image from 1964 made by the US Airforce (after <https://earthexplorer.usgs.gov>).

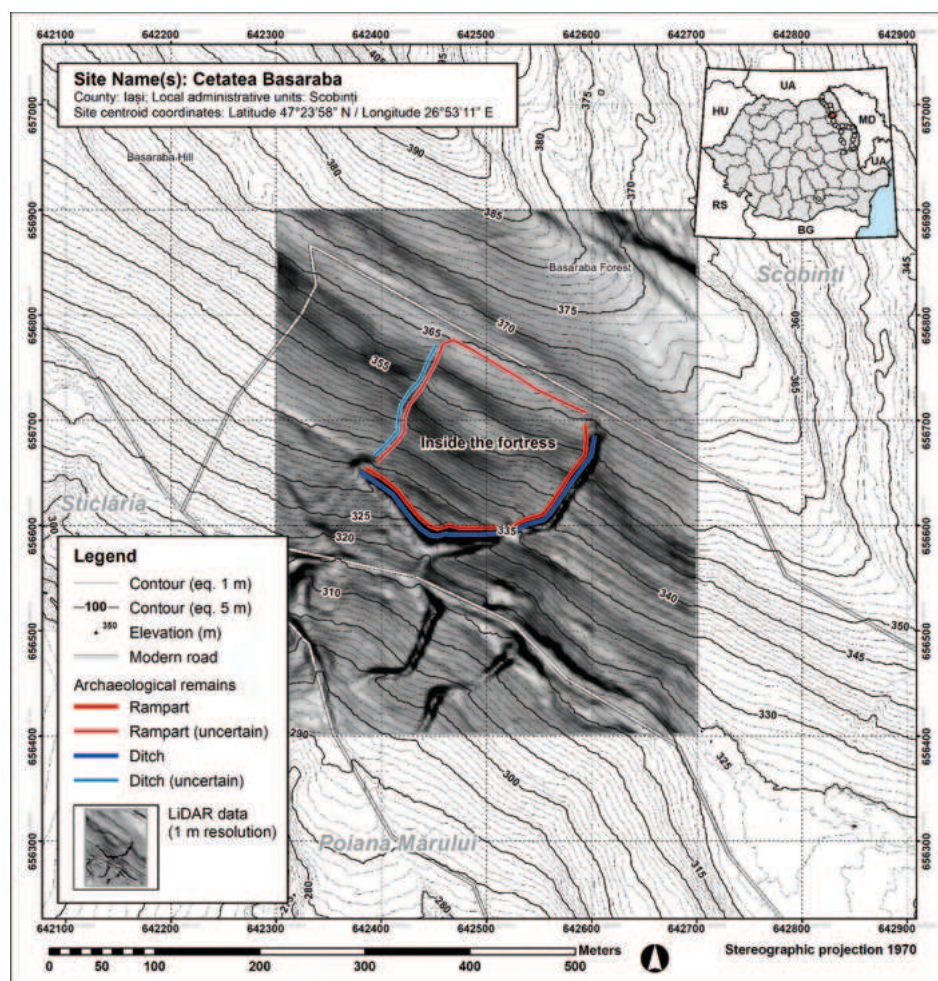


Figure 115. Scobinți-Basaraba hillfort. Interpretation map.

a) Generally streams and torrents follow a path that coincides with the axis of maximum slope, with smaller or larger deviations; so if the eastern and western ditches could be explained as a result

of runoff and erosion, this explanation cannot be valid for the southern ones, which almost follow the contour line of the slope (with a deviation no greater than 15°).

b) The ditch, as can be seen on field, has a regularity that is difficult to explain if we would be observing a natural phenomenon.

c) The idea that the ditches represent the remains of some deepened roads is opposed by their aspect.

d) Finally, a last argument in favor of A. C. Florescu's hypothesis is the presence of sporadic pottery shards specific to the period of the 5th–3rd centuries BC period in the enclosure, in the gardens of locals.

Beyond our preliminary observations, it remains for future invasive archaeological research to shed more light on this case. In any case, we are most likely dealing with an archaeological site, an early Late Iron Age hillfort.

E. Bibliography:

Florescu 1980, p. 14; Zanoci 1998, p. 151; Turcu 2002, p. 149; Arnăuț 2003, p. 260.

III.1.29. Scobinți-Dealul lui Vodă (Iași County)

A. Scobinți-Dealul lui Vodă

B. Field survey by N. Zaharia in 1966; Field survey by A. Florescu in 1971; field surveys by A. Berzovan between 2016–2021.

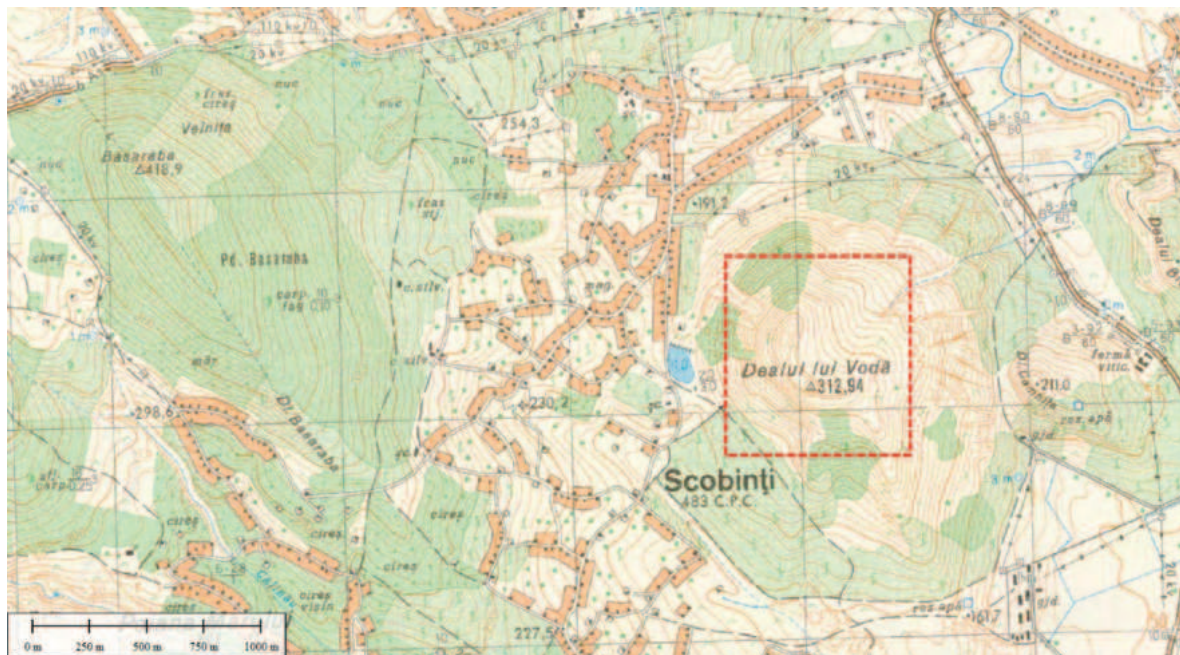


Figure 116. Scobinți-Dealul lui Vodă on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C. 1. The site is located in the northern part of the Moldavian Plateau, more precisely at the contact between the Dealul Mare massif and the lower area of the Jijia Plain. It occupies the plateau of a prominent and isolated hill-Dealul lui Vodă [Hill of the Voivode] – with an altitude of approx. 315 m, dominating with approx. 150–170 m difference in level the surrounding areas lower, benefiting from a wide area of visibility in all directions. C.1.a. pasture, vineyard and forest plantation; C.1.b. The state of preservation is very precarious; the site being affected by landslides.

C.2. The closest source of water is in the valley, around 300–400 m distance.

C.3. 48° 23' 39" N, 26° 55' 11" E.

C.4. Approx. 315 m.

C.5. Around 157–170 m.



Figure 117. Scobinți-Dealul lui Vodă. Google Earth satellite image.



Figure 118. Scobinți-Dealul lui Vodă. Aerial photography from western direction; arrows mark the rampart (A. Berzovan).

D. Description

D.1. Hilltop hillfort; single enclosure.

D.2. 5th–3rd centuries BC; Poieniști – Lucașeuca Culture (2nd–1st centuries BC).

D.3. Rampart.

D.4. (?).



Figure 119. Scobinți-Dealul lui Vodă. Aerial photography of the rampart (A. Berzovan).

D.5. Description of the archaeological situation

The site was discovered as a result of field survey carried out by A. Florescu in 1971. However, archaeological discoveries are reported from the same area since the early 20th century: in 1920 was found a bronze situla of Roman origin from the 2nd–1st centuries BC, and in 1921 I. Bălănescu is said to have discovered an urn with broken bones, a dagger blade and fragments of a bracelet. The funerary discoveries are apparently linked to a later chronological frame, of the Poienеști – Lucașeuca type and might indicate the presence of a necropolis.

The rampart is visible on the northwest, west, south, and southeast sides, at the edge of the plateau; it reaches heights ranging from 1.5 to 2.5 m. On the east and northeast sides, the rampart is no longer visible, probably destroyed as a result of landslides; thus, the total size of the enclosed area is difficult to estimate. During his field surveys, A. Florescu made some observations on the interior structure of the rampart, which apparently could have contained a stone wall²⁷⁷; unfortunately, we could not verify the information. What we observed is the fact that repeated landslides, due to both natural factors and the use of the plateau since the Middle Ages as a wine-growing area, have led to extensive destruction of the hillfort. Nowadays is a more or less *vestigial hillfort*, as the interior of the enclosure is completely disturbed. Sporadic ceramic fragments from the 5th–3rd centuries BC period had been found throughout the inside of the enclosure.

E. Bibliography:

Florescu 1971, p. 104; RAJ Iași II 1985, p. 365; Turcu 2002, p. 149; Arnăuț 2003, p. 260; Florescu 2022, p. 56–57; Teodor 1999, p. 175; Berzovan 2017.

²⁷⁷ Florescu 2022, p. 56.

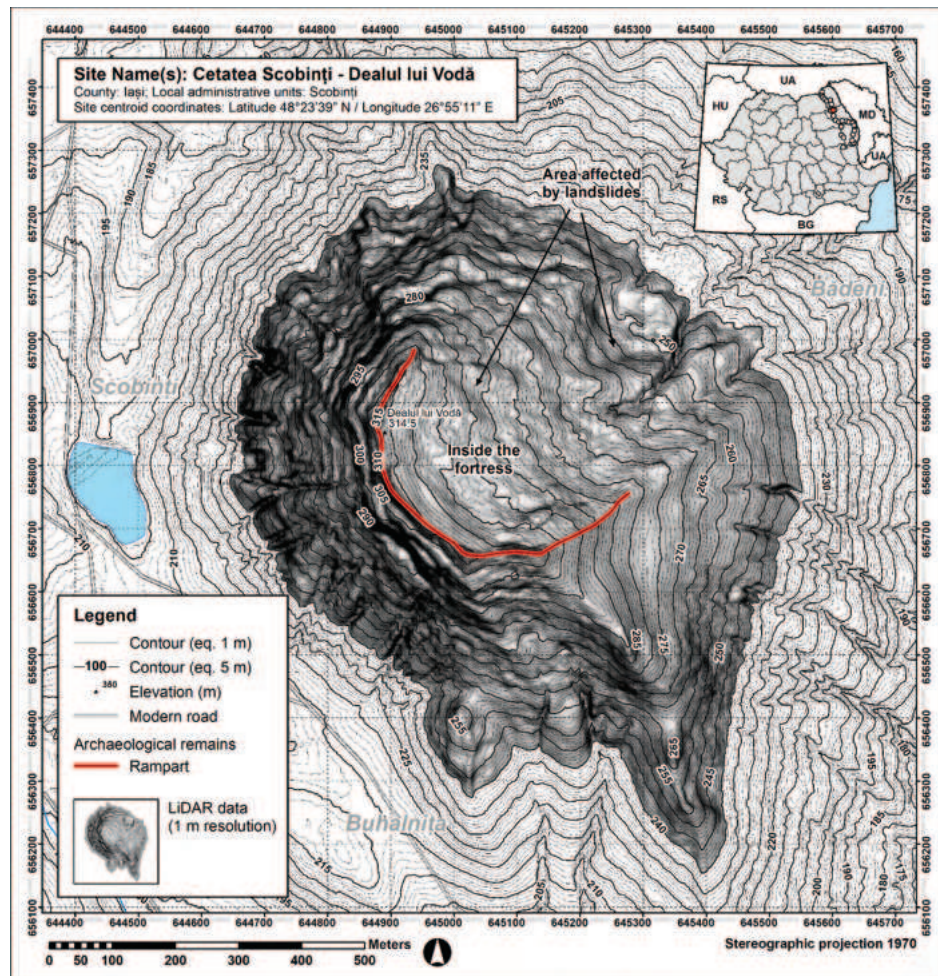


Figure 120. Scobinți-Dealul lui Vodă hillfort. Interpretation map.

III.1.30. Scobinți-Grădiștea (Iași County)

A. Scobinți-Grădiștea.

B. Field survey by Arheoinvest Platform between 2011–2017; field surveys by A. Berzovan in 2021.

C. Geographical positioning:

C. 1. The site is located in the northern part of the Moldavian Plateau, more precisely in the eastern sector of the so-called Jijia Plain. It has an atypical position, located on both sides of the Butâi brook. The altitudes oscillate between 110–148 m. The site has a rather limited area of visibility.

C.1.a. Agricultural fields; C.1.b. The state of preservation is precarious; the site is affected by intensive agriculture

C.2. The closest source of water is Butâi valley, which traverses the objective.

C.3. 47° 24' 54" N, 26° 59' 59" E.

C.4. Approx. 148–110 m.

C.5. -

D. Description

D.1. Hill-slope hillfort; single enclosure.

D.2. 5th–3rd centuries BC (?).

D.3. Rampart and ditch.

D.4. 46 ha.

D.5. Description of the archaeological situation

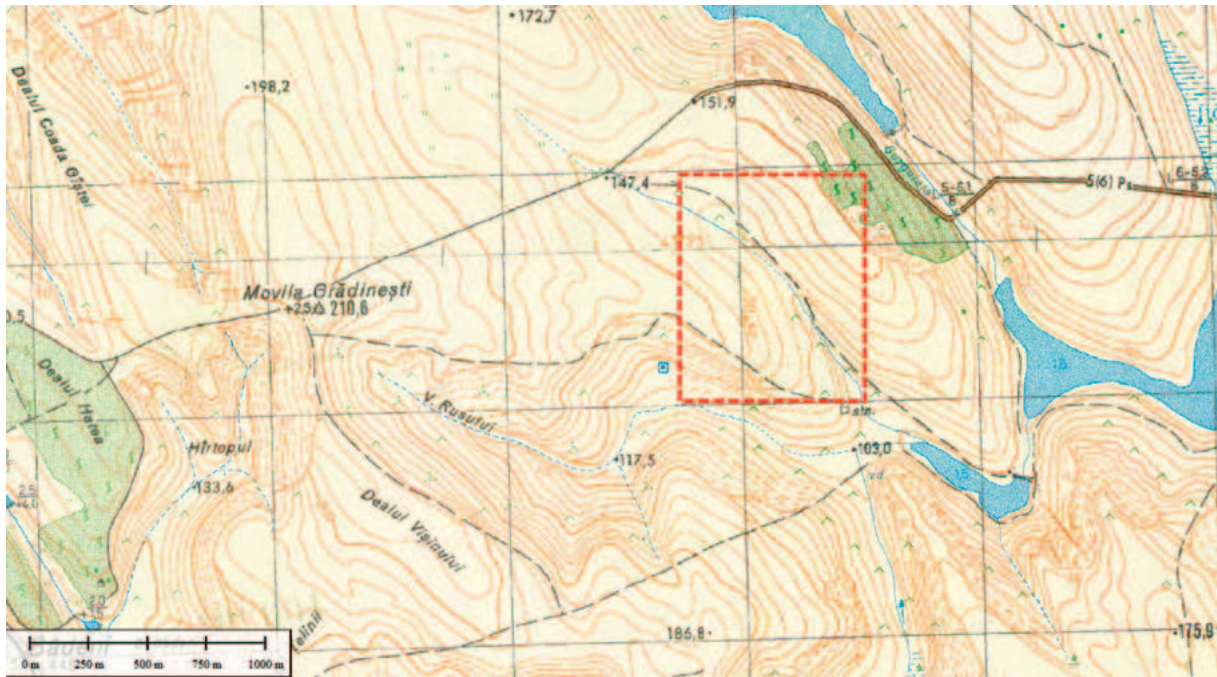


Figure 121. Scobinți-Grădiștea on 1:25 000 topographical map of Romania.



Figure 122. Scobinți-Grădiștea on Google Earth satellite image.

The site was discovered during the research conducted by Arheoinvest platform from Alexandru Ioan Cuza University of Iași in 2011, based on the analysis of satellite images and older aerial photos. The archaeological site has an approximately rectangular shape, with rounded corners, occupying both sides of the Butăi brook, which passes approximately through the middle of it. The fortification elements consist of a rampart and (probably) an adjacent ditch, strongly flattened by the agricultural works, being visible on the surface in the form of lighter colored soil stripes. The site has two “V”-shaped entrance gates, both located in the western sector. In the absence of archaeological excavations and relevant archaeological material, the arguments for a chronological classification in the

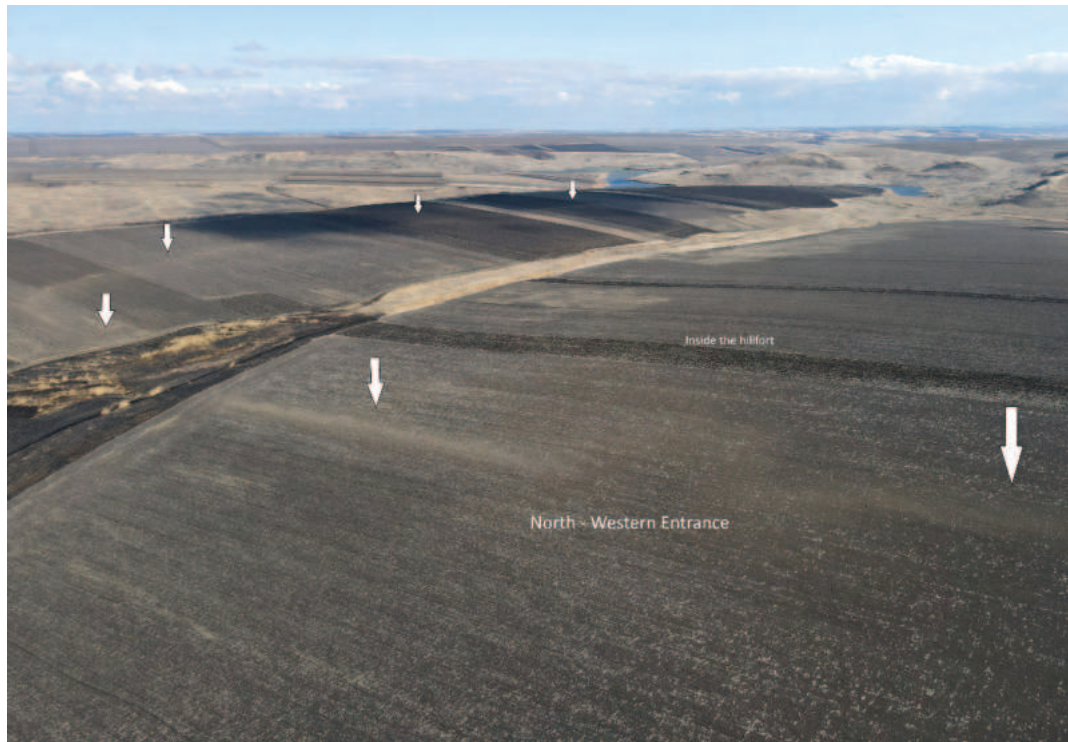


Figure 123. Scobinți-Grădiște. Aerial photo of the north-western area; arrows mark the remains of the rampart and the ditch (A. Berzovan).



Figure 124. Scobinți-Grădiște. Aerial photo of the north-western area; arrows mark the remains of the rampart and the ditch (A. Berzovan).

5th–3rd centuries BC period come from the obvious similarity (in shape, location, type of gates) with the hillfort from Victoria – *Șanțul Caterinei* (Botoșani County) which was under investigation (see *below* in our Repertoire).

It is difficult to say whether this hillfort had military functions or rather represents a structure with a completely different functionality.

E. Bibliography:

<http://arheoinvest.uaic.ro/research/prospect/> (accessed on 03.11.2021)

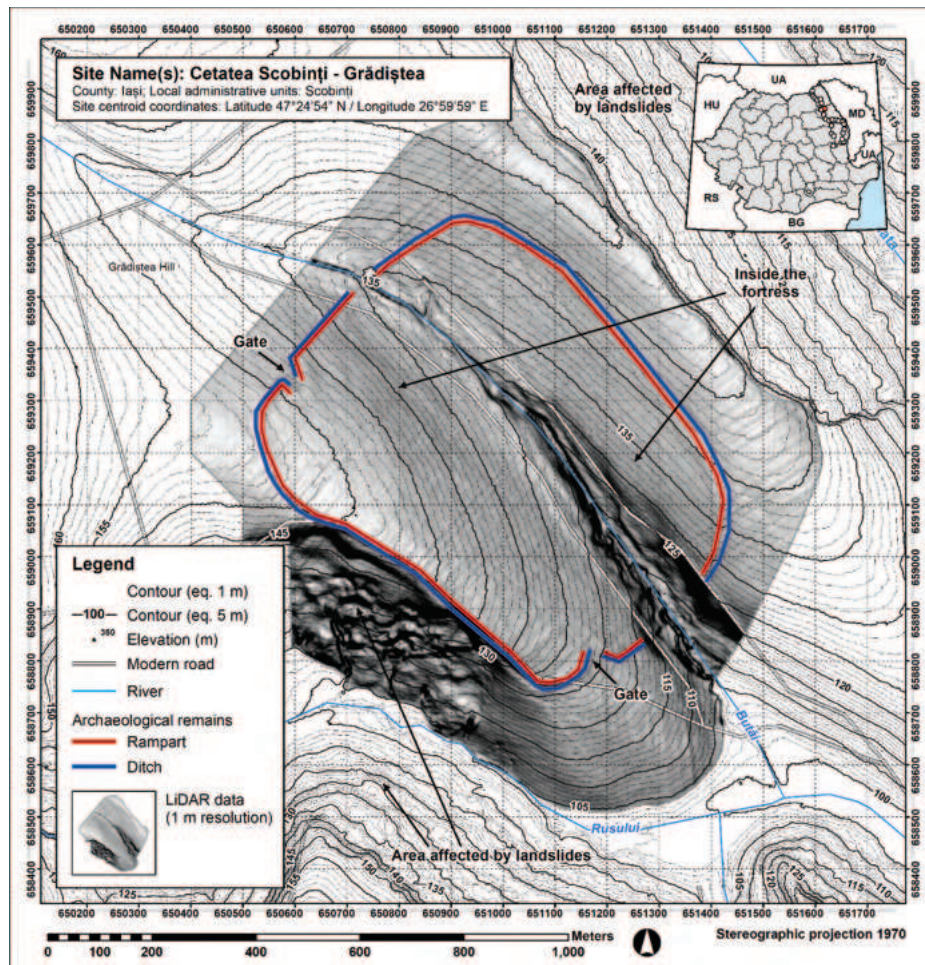


Figure 125. Scobinți-Grădiștea. Interpretation map.

III.1.31. Șendriceni-Dealul Țiclău / Cetate (Botoșani County)

A. Șendriceni-Dealul Țiclău / Cetate.

B. Field Survey by A. Nițu and N. Zaharia in 1954; Field survey by A. Berzovan and A. Kovács in 2021.

C. Geographical positioning:

C.1. From geographical point of view, the site is located in the same subunit as the previous one, in the contact area with the Jijiei Plain. It occupies a promontory detached to the north from Țiclăului Hill, having an altitude of approx. 220–230 m, dominating with 40–50 m level difference the lower area of the Cănașiței valley, located immediately to the north. The area of visibility is quite wide to the north, northwest and northwest, offering wide perspectives across the above mentioned valley. To the south, however, the visibility is obscured by higher heights. C.1.a. Currently, the terrain is covered by more or less wooded pasture; C.1.b. The state of preservation is precarious; the defensive system is affected by modern interventions.

C.2. In the immediate vicinity are a number of springs and brooks.

C.3. 47° 55' 39" N, 26° 35' 36" E.

C.4. Approx. 220–230 m.

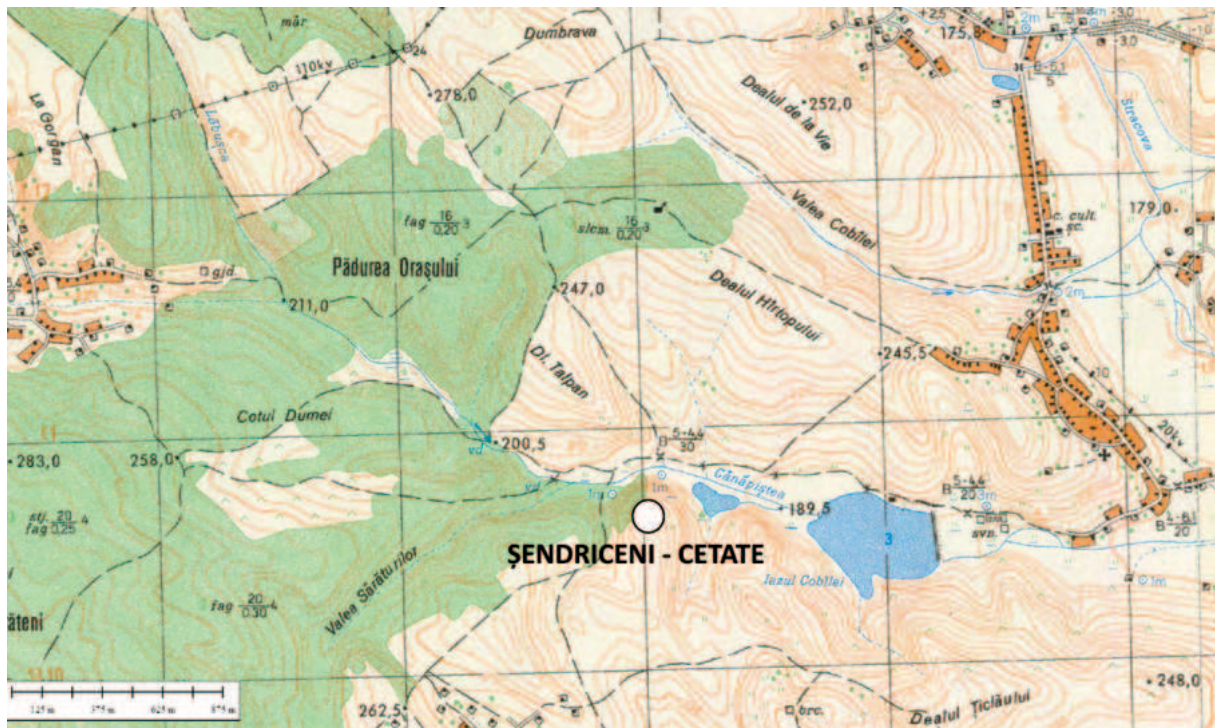


Figure 126. Șendriceni-Cetate on 1:25 000 topographical map of Romania.



Figure 127. Șendriceni-Cetate / Dealul Țiclău hillfort (Google Earth).

C.5. Around 40–50 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. 0.8 ha.

D.5. Description of the archaeological situation

The site was first discovered by archaeologists N. Zaharia and A. Nițu on the occasion of a field survey conducted in 1954. On the occasion of these surveys, the two archaeologists collected a series



Figure 128. Şendriceni-Cetate / Dealul Țiclău hillfort. Aerial photo (A. Berzovan).

of corroded ceramic remains and they framed them in transition period from the Eneolithic to the Bronze Age (Horodiştea – Folteşti culture), also noticing some flint splinters and blades²⁷⁸. The authors described the defensive system, however they do not dwell much on the issue of its dating. D. Gh. Teodor proposes a dating of the hillfort in the Early Middle Ages based on nearby finds²⁷⁹.

To the north, east and west the promontory is defended by very steep slopes. The only easy access route from a military point of view is from the south, coming on the plateau of Țiclău Hill. Here was built the defensive system composed of rampart and outer ditch, arranged in a semicircular shape, which encloses an area of approx. 0.8 hectares.

The defensive elements are poorly preserved due to various modern interventions. The rampart retains a width at the base of approx. 5–6 meters and barely reaches a height of one meter in some places. The ditch has an opening at the opening of approx. 5–6 meters and a depth that reaches the edges approx. 1–1.5 meters.

The field research carried also led to the recovery of several hand-made potshards, including a fragment of a ceramic vessel with a flattened ovoid button, specific to the beginning of the Late Iron Age. For this reason, we choose to frame this fortification chronologically in this period, of course, with the necessary scientific reservations.

The presence – near the hillfort of Şendriceni – of the toponym “Valea Sărăturilor” [Valley of the Salts] can be a significant element. It suggests the existence of salt springs in the region. By building a

²⁷⁸ Zaharia 1955, p. 904; Zaharia *et alii* 1970, p. 234; RAJ Botoşani 1976, p. 252, the authors of the Repertoire mention that they did not verify on field the hillfort, but simply took the information from older literature. The site is also mentioned in the second edition of the repertoire of Botoşani county (RAJ Botoşani 2016, p. 400) but the coordinates offered in volume and those on the corresponding cartographic server indicate an erroneous location, at approx. 1 km further east than its real location, proof that most likely the author did not made any field surveys in the area, but placed the objective on the map on the basis of the existing data in the bibliography.

²⁷⁹ Teodor 1997, p. 68.

small fort meant to control access to the Cânepiștei Valley, the inhabitants that lived in these regions could have sought to protect these springs, of prime importance for them and their flocks.

E. Bibliography:

Zaharia 1955, p. 904; Zaharia *et alii* 1970, p. 234; RAJ Botoșani 1976, p. 252; Teodor 1997, p. 68; RAJ Botoșani 2016, p. 400; Berzovan, Kovács 2021.

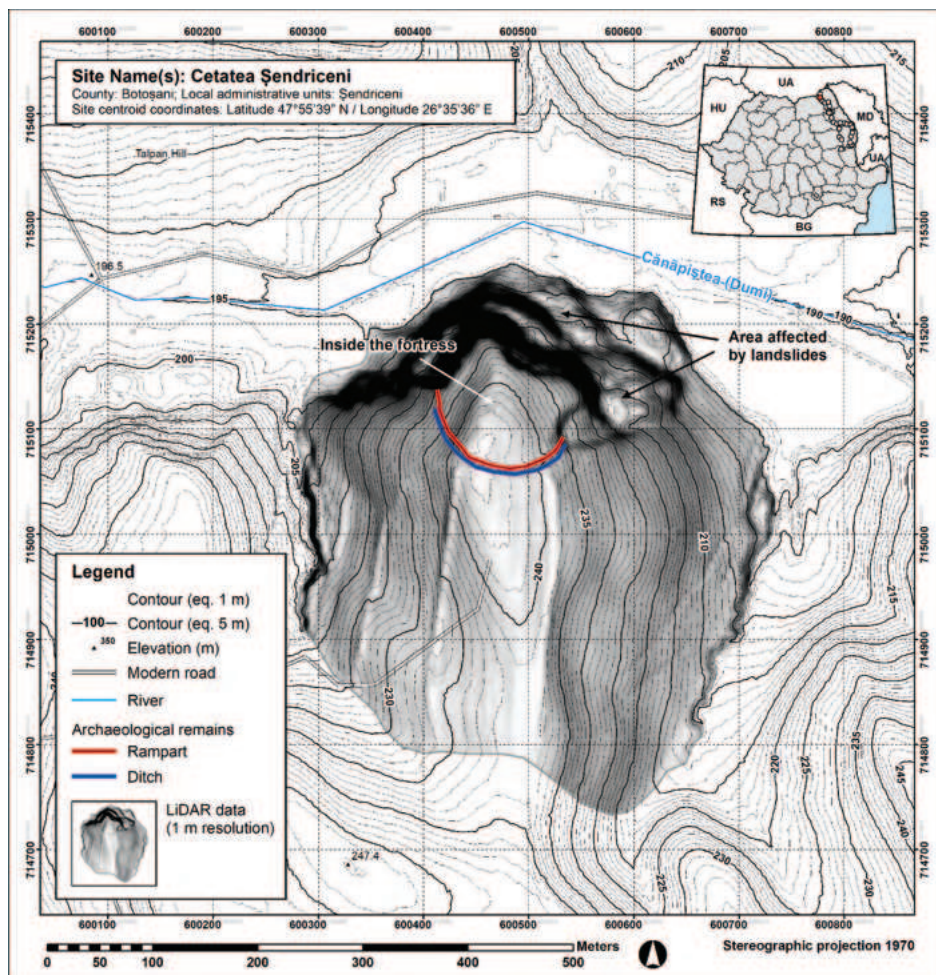


Figure 129. Șendriceni-Cetate / Dealul Țiclău hillfort. Interpretation map.

III.1.32. Stâncești-Cetate / Bobeica (Mihai Eminescu commune, Botoșani County)

A. Stâncești-Cetate / Bobeica / Pădurea din Șanț²⁸⁰.

B. Field surveys in the late 19th century; field survey by A. Nițu and N. Zaharia in 1954; archaeological excavations by A. C. Florescu between 1960–1970; field surveys by A. Berzovan in 2016–2021; magnetometric survey by D. Ștefan – 2020.

C. Geographical positioning:

C.1. From geographical point of view, the site is located in the northern part of the Moldavian Plateau, more precisely on the eastern frame of the forested Dealul Mare – Culmea Bour massif, in the contact area with the Jijia Plain, a region with steppe and forest-steppe characteristics. The hillfort – composed of two adjoined enclosures named Fort 1 (northern) and Fort 2 (southern) occupies the western part of a larger plateau, at a total altitude between 190–230 m, dominating with around 40–70 m the lower surrounding areas to the north and west. C.1.a. Fort 1 is covered by agricultural

²⁸⁰ Oldest toponyms are “Bobeica” or “Pădurea din Șanț”, but nowadays the locals from the Stâncești village simply call the hillfort “Cetatea”.

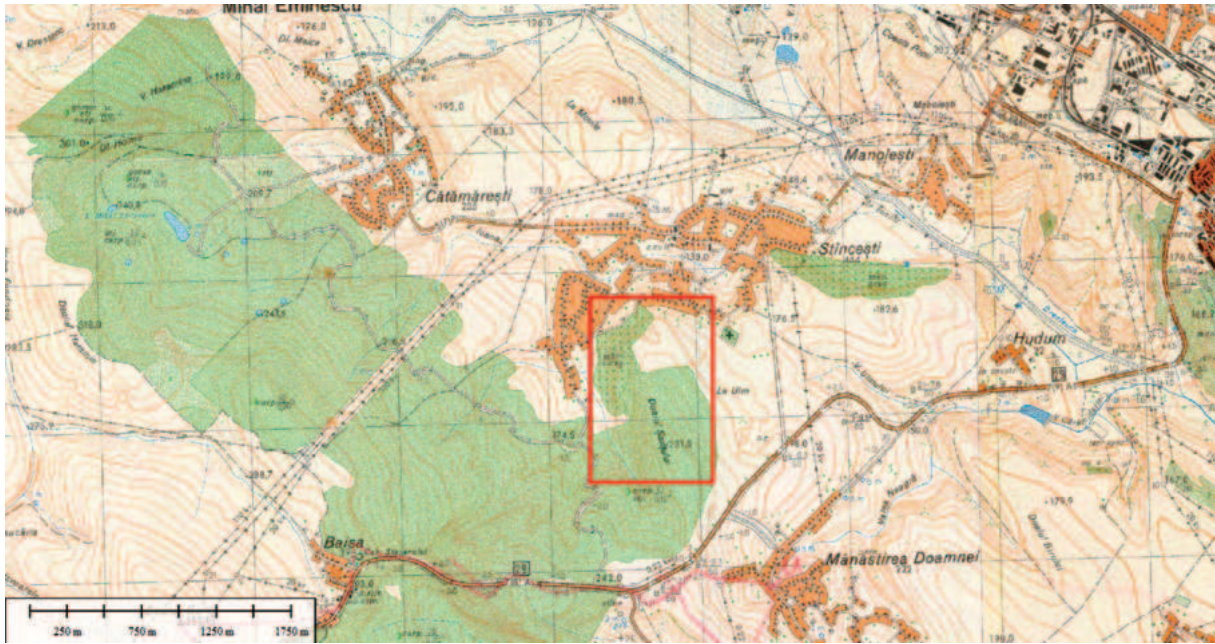


Figure 130. Stâncești hillfort on 1:25 000 topographical map of Romania. The placename “Dealul Șanțului” [Hill of the Ditch] is visible; the limits of Fort 1 are also marked on the map.

fields; Fort 2 is covered by forest; **C.1.b.** The state of preservation is good, as the agricultural works in Fort 1 have a rural, subsistence character, without affecting in depth the archaeological layers. However, it would be optimal if the surface of both forts would be taken out of agricultural and forestry circuit.

C.2. In the immediate vicinity are several springs and brooks.

C.3. 47° 44' 09" N, 26° 35' 45" E.

C.4. Approx. 190–230 m.

C.5. Around 40–70 m.

D. Description

D.1. Enclosed plateau; two enclosures.

D.2. 6th–3rd centuries BC; **D.2.a.** Cucuteni Culture; Bronze Age; 2nd–4th century AD period.

D.3. Rampart with ditch.

D.4. Fort no. 1: 22 ha; Fort no. 2: 23 ha. Total size: 45 ha.

D.5. Description of the archaeological situation

D.5.1. Short history of research

The presence of ancient fortifications in this area is known as since A. Odobescu's *Questionnaire*, the information being mentioned also in P. Polonic's manuscripts. However, the first systematic field research took place much later, in 1954, being conducted by A. Nițu and N. Zaharia. The discovery in 1957, during some agricultural works, of an archaic amphora of Chios was the trigger for the beginning of archaeological excavations.

A. C. Florescu started archaeological excavations in 1960 that lasted until 1970; diggings were made in all years, with the exception of 1969. The excavation system used involved very long trenches, sometimes hundreds of meters, with a relatively small width (1.25–1.5 m), as Florescu tried to approach as many sectors as possible. When dwellings or other structures were discovered, cassettes of varying sizes were opened. The research led to the discovery of a large number of features (dwellings, pits, etc.) but also a rich archaeological material. Special attention was given to the problem of the defensive system, A. C. Florescu executing multiple sections through the ramparts and ditches. An important moment in this research took place in 1968, when the famous deposit was discovered. Due to various reasons, the results were not published timely; the monography of this

site was published posthumously in 2005 by M. Florescu, unfortunately with some losses in documentation. The excavations covered less than 5% of the total surface of the fort.

Since 1970, the fort was no longer researched, although sporadic field surveys took place, made by various researchers from Botoșani and Iași. In the year 2020, a magnetometric survey was made by D. Ștefan on a small area from Fort no. 1. In the near future, we plan to begin a new systematic research in this important hillfort.

D.5.2. Planimetry

The hillfort of Stâncești consists of two adjoined enclosures, named by A. Florescu “Fort 1” (the northern one) and “Fort 2” (to the south). *Fort 1* is delineated to the north and west by the steep slopes of the plateau; it is likely that on this side a small scale palisade might have existed. The landslides are old and there are no arguments to suppose a larger extension of the enclosure. The western and southern parts of *Fort 1* are delineated by a massive rampart and ditch, well preserved. The rampart presents a width of around 20–24 m and it presents height of 5–6 meters. N. Zaharia and A. Nițu mentioned in the interior of Fort 1 the existence of two “mounds,” but the subsequent archaeological excavations proved that these were in fact the remains of surface dwellings. Total size of *Fort 1* is 22 ha.

Fort 2 is conjoined with *Fort 1*, and is defended on all sides by rampart and ditches. The fortification elements are well preserved, reaching widths between 14–16 m and preserved heights between 2 and 3,50 m. It is interesting to note the presence – in the southern extremities of *Fort 2*, of two mounds, with an accentuated profile; these could be burial mounds from older periods, but their proximity to the defensive system makes plausible the idea of them being used as maybe bases for towers. Future archaeological researches can confirm the hypothesis. Total size of *Fort 2* is 23 ha.

D.5.3. Chronology, evolution, functionality

The analysis of the discovered archaeological material and of the features allowed Florescu to propose a chronological and evolutionary scheme of the Stâncești hillfort, summarized by us in the table below.

Stage	Chronology	Fort no. 1	Fort no. 2	Markers
1	End of 6 th –5 th centuries BC	Functional	-	Early Chios Amphorae, pit houses
2	4 th century BC	Both functional		Thassos amphorae, gray wheel-made pottery, the hoard, surface dwellings
3	Beginning of the 3 rd century BC	Fortifications dismantled	-	Rhodos amphorae, pit houses

Table 3. Chronology and evolution of Stâncești hillfort (after Florescu, Florescu 2005; Măndescu 2010).

Accepting these preliminary data, it would appear that the two enclosures have been operating since the 6th century BC, until the 3rd century BC, for around three centuries. This would turn the Stâncești site into a real “stratigraphic column” for this early period of the Late Iron Age in the East Carpathian regions. However, certain aspects of this proposed scheme would need to be reviewed and re-verified. For example, on the occasion of the verification of the archeological artifacts from the collections of the Botoșani County Museum, we could notice the sporadic presence of some ceramic fragments of West-Podolian type, not mentioned by the authors of the excavations. Furthermore, in the published monograph there are presented clay spoons. These kind of artifact are quite specific to the Poienești – Lucașeuca culture. This calls into question the idea of the absence of traces of this culture in Stâncești – claimed by A. and M. Florescu – as well as the problem of the end-date of this site.

The rich and varied discoveries of archeological material, the discovery of a significant number of domestic features, indicate quite clearly that the fortress of Stâncești played the role of a residential center. Greek imports, the treasury, but especially the scale of the defensive system are proofs that support the important role played by this community at the time.

E. Bibliography:

Nițu, Zaharia 1955, p. 333–334; Florescu, Rață 1969, p. 9–22; Zaharia *et alii* 1970, p. 263–264; Florescu 1971, p. 55–62; RAJ Botoșani 1976, p. 176–177; Turcu 2002, p. 152–154; Arnăuț 2003, p. 264–265; Florescu, Florescu 2005; Măndescu 2010, Cat., p. 147–149; RAJ Botoșani 2016, p. 290; Florescu 2022, p. 56–59.

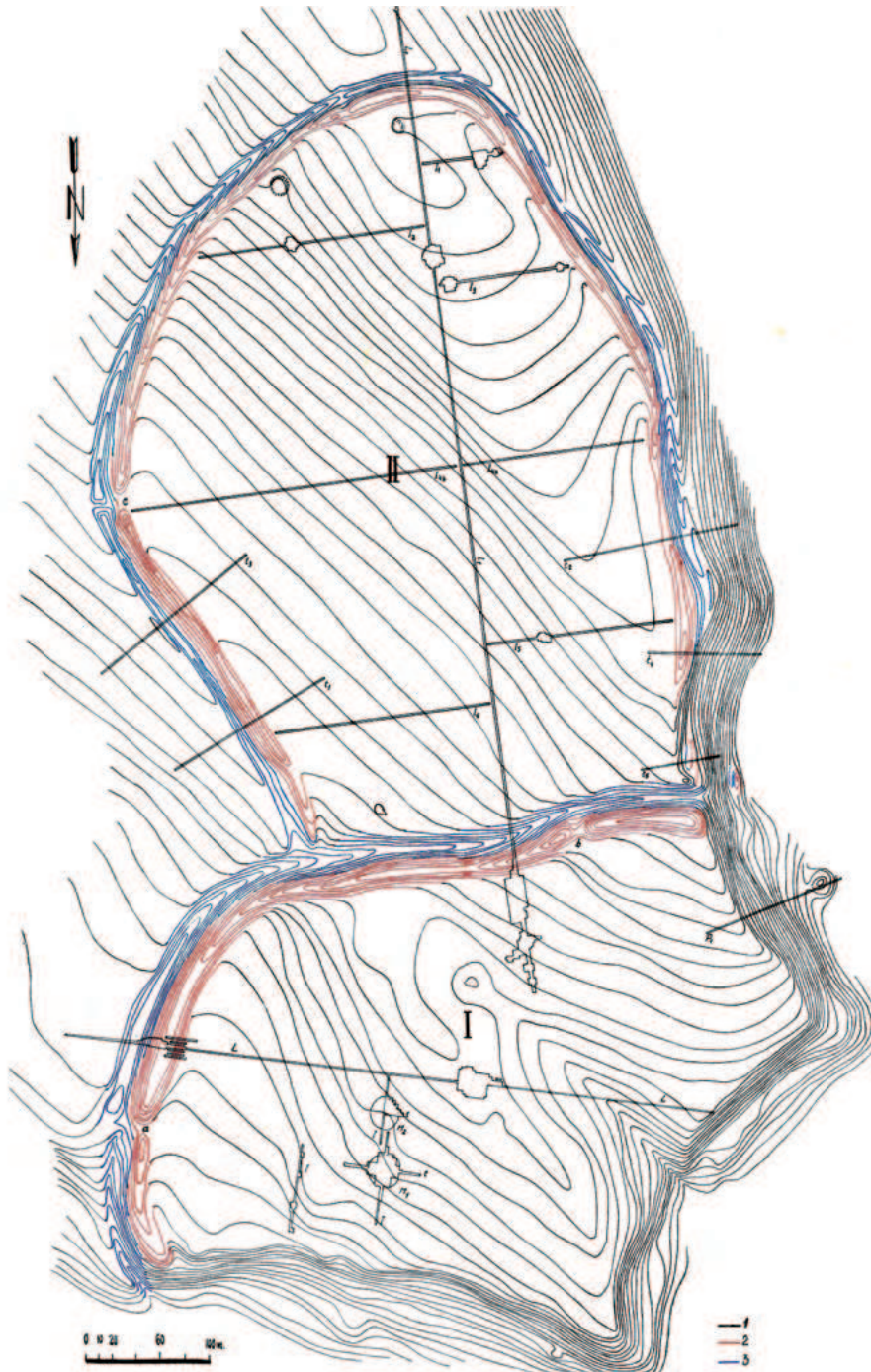


Figure 131. Plan of the Stâncești hillfort made by A. Florescu and C. Florescu (after Florescu, Florescu 2005).

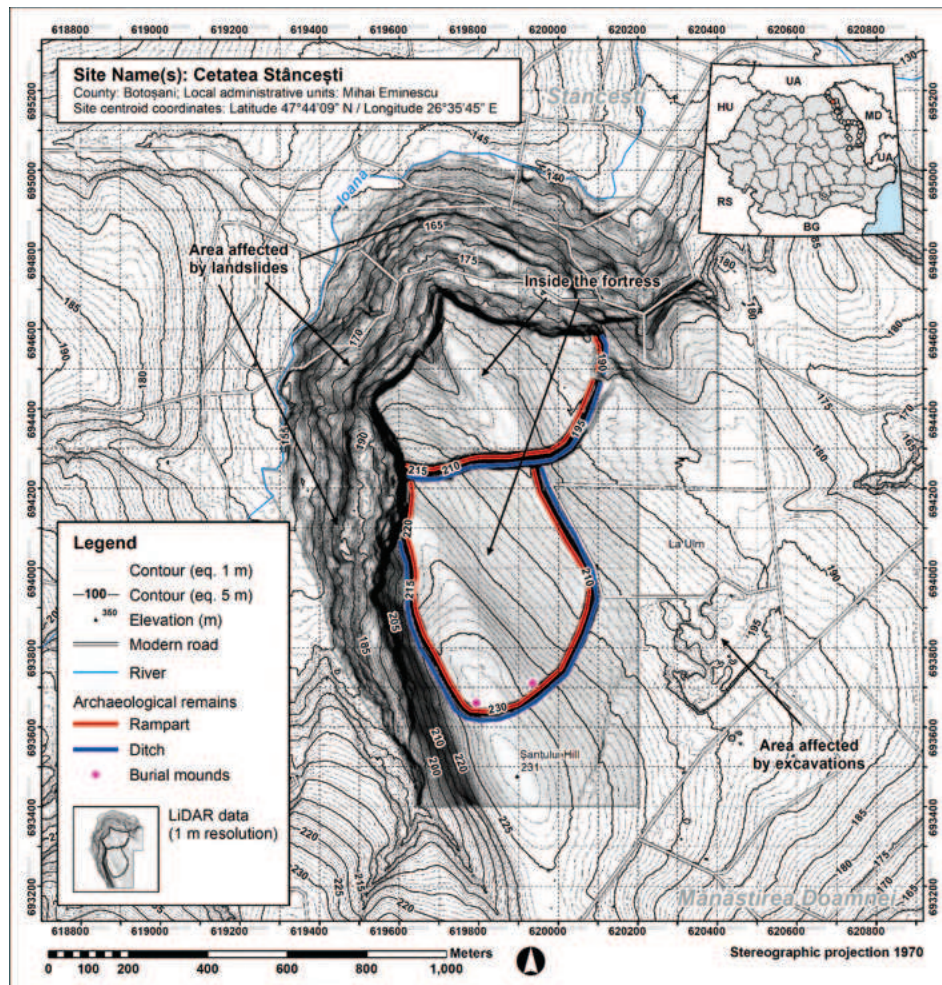


Figure 132. Stâncești hillfort. Interpretation map.

III.1.33. Stănișești / Răchitoasa-Cetățuia (Bacău County)

A. Stănișești / Răchitoasa-Cetățuia.

B. Field surveys during the late 19th century; field survey by A. Berzovan, M. Oancă and M. Mamalaucă during 2020.

C. Geographical positioning:

C.1. From the point of view of geographical positioning, the site is located in the southern part of the Moldavian Plateau, more precisely in the area of Tutovei Knolls. It occupies the northern end of a high plateau suggestively named on topographic maps of Romania “Cetățuia Hill” [Fortress Hill], located on the long interfluvium that separates the basins of the rivers Zeletin (east) and Dobrotfor (west), both from the Bârlad river basin. It is located at an altitude of approx. 515–517 m, dominating with approx. 250–300 m difference in level the lower surrounding areas, providing good visibility to the east and west, to the river valleys mentioned above. Although we are in the Tutovei Knolls, due to the large differences in level and fragmentation, the landscape has an almost sub-mountainous aspect here as well. Administratively speaking, we are on the border between Stănișești and Răchitoasa communes; the limit passes approximately through the middle of the target. C.1.a. Currently, the terrain is covered by forest; C.1.b. The state of preservation is good.

C.2. In the vicinity are a number of springs and brooks.

C.3. 46° 30' 26" N, 27° 19' 30" E.

C.4. Approx. 515–517 m.

C.5. Around 250–300 m.

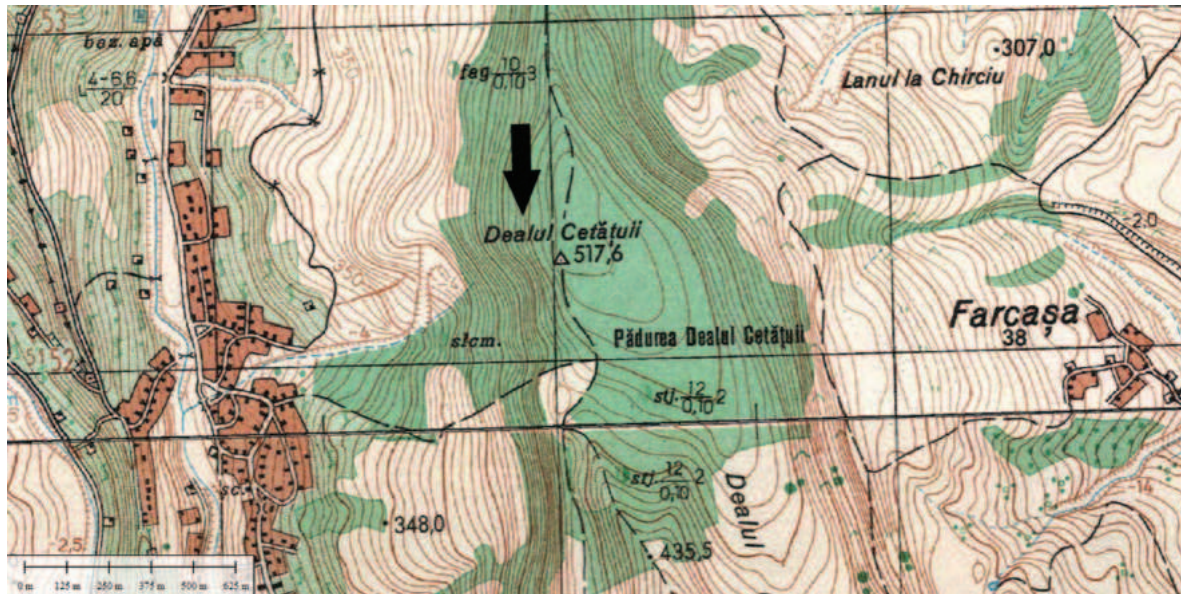


Figure 133. Stănișești / Răchitoasa-Cetățuia hillfort on 1:25 000 topographic map of Romania.

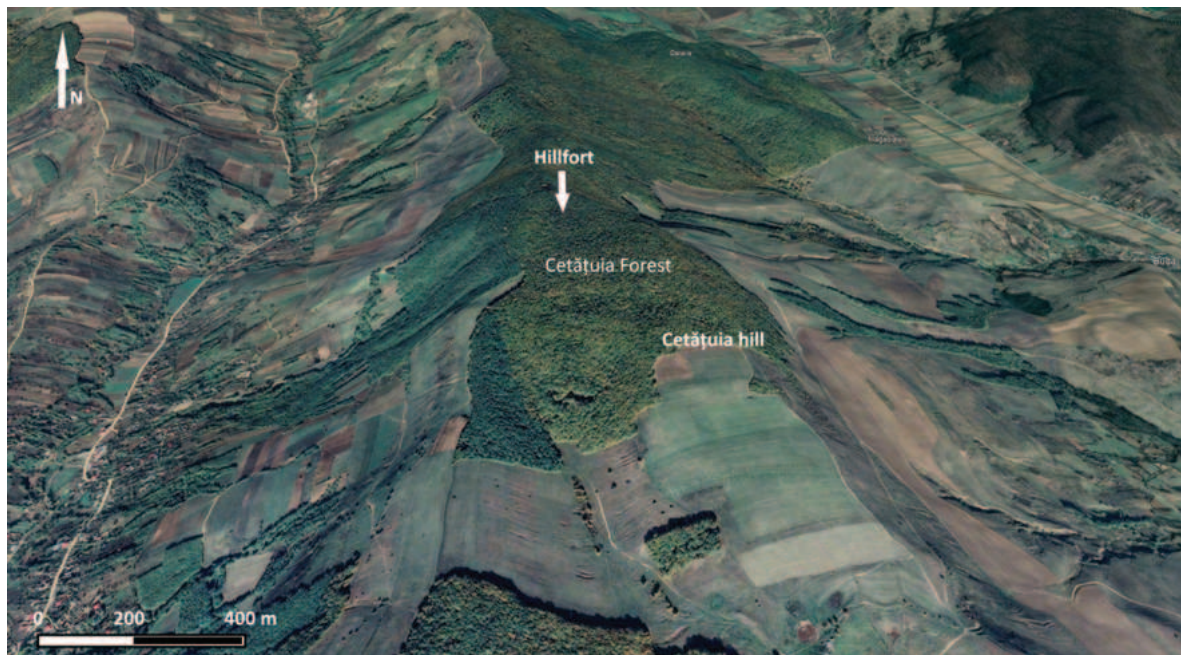


Figure 134. Stănișești / Răchitoasa-Cetățuia hillfort on Google Earth satellite images (3d view, with vertical exaggeration)

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. 0.8 ha.

D.5. Description of the archaeological situation

Information about the existence of a fortress at this point can be found in the Great Geographical Dictionary of Romania, where it is mentioned the presence of “fortification elements that would enclose on the “Zarea Dobrotforului” an area of about 512 square meters”²⁸¹. The existence of traces from ditches in the area, near the village of Buda (Răchitoasa commune) and the “legends about

²⁸¹ Lahovari 1899, p. 37; see also Lahovari 1899, p. 348;



Figure 135. Stănișești / Răchitoasa-Cetățuia hillfort. Rampart and ditch.

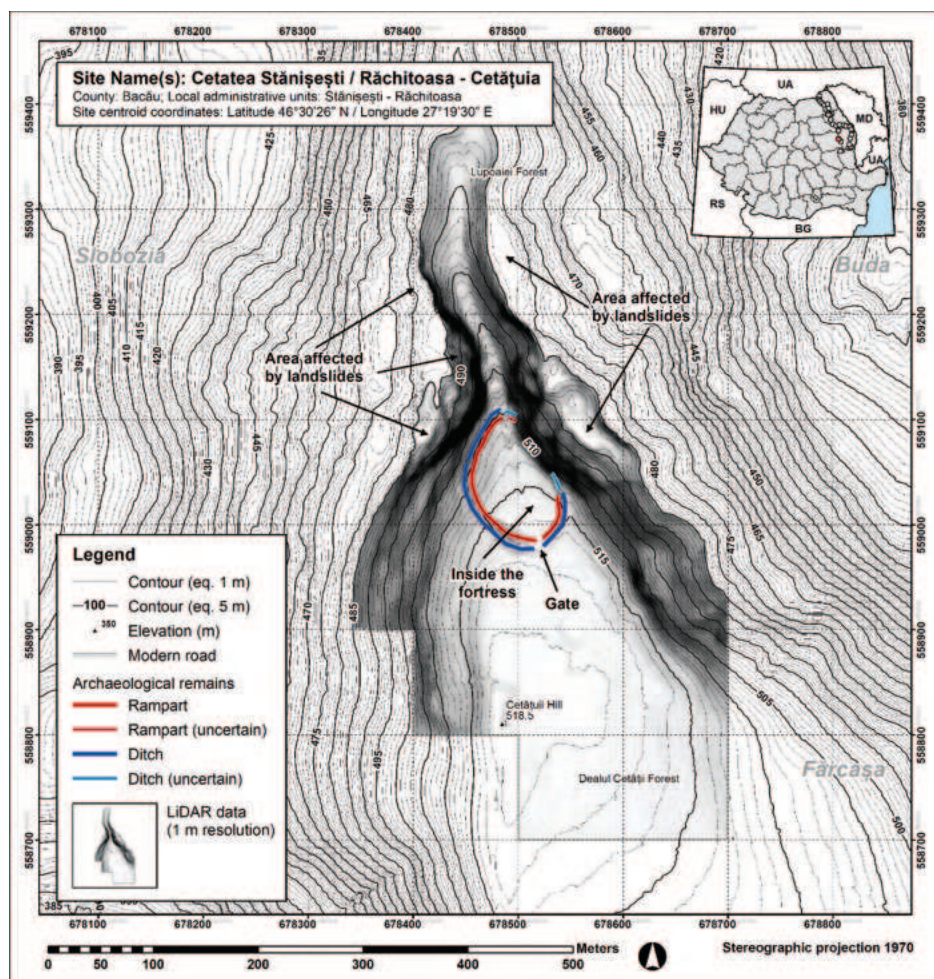


Figure 136. Stănișești / Răchitoasa-Cetățuia hillfort. Interpretation map.

the Tartars” are also recorded by other sources²⁸². Some lapidary data we found in the National Archaeological Repertory within the archives of the Institute of Archeology in Bucharest, where are mentioned some brief information about the site, within the village of Slobozia de Sus in the old Tecuci county; we are probably dealing with data taken from the Great Geographical Dictionary and from the locals, as a detailed description is missing.

The fortress has an approximately polygonal, rounded shape, the total length of the fortification elements being about 230 m, enclosing an area of about 0.8 hectares. The east side, protected by steep slopes, preserved only a small ditch dug down the slope; on the south side, the rampart, doubled by the outer ditch, forms a semicircle. The western side, despite the slopes, was also defended with a weak visible rampart and ditch, the latter acquiring the appearance of a small terrace as a result of clogging. In the northern area, the plateau narrows a lot, the fortress being closed by a rampart and a ditch. Unfortunately, all these are quite affected by the exploitation road that passes through a possible gate. In general, the rampart has relatively small dimensions: height maintained by approx. 1–1.5 m, and a width at the base of 4–5 meters, in the south-eastern area being affected by the uprooting of some trees. The ditch has a depth of approx. 1–1.5 m and an opening of approx. 6–7 meters, being more pronounced on the southeast side.

During our field survey we found fragments of handmade ceramic vessels, adorned with alveolar belts, belonging to jar-type vessels, which can be widely framed during the 5th–3rd centuries BC and also of burnt adobe fragments.

We appreciate that the main role of this fortress was to control the access on the toll road that follows the interfluvium between the rivers Zeletin and Dobrotor.

E. Bibliography:

Lahovari 1899, p. 37; Lecca 1937, p. 99; Berzovan *et alii* 2020a.

III.1.34. Todirești-Dealul Șanțurilor (Iași County)

A. Todirești-Dealul Șanțurilor.

B. Field survey by P. Nica during the 1980s; field survey by V. Chirica, M. Tanasachi and Gh. Muraru in 1983; field surveys by A. Berzovan between 2016–2021.



Figure 137. Todirești-Dealul Șanțurilor hillfort on 1:25 000 topographical map of Romania.

²⁸² Lecca 1937, p. 99.

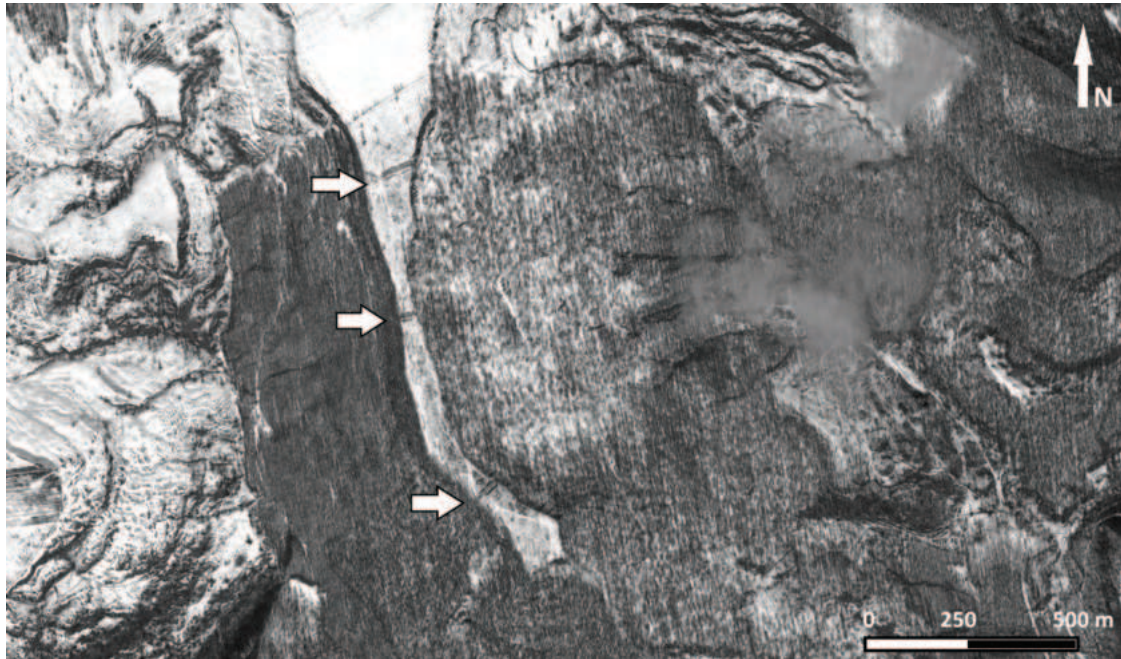


Figure 138. Todirești-Dealul Șanțurilor hillfort on Google Earth satellite images.



Figure 139. Todirești-Dealul Șanțurilor hillfort. View towards Cotnari-Cătălina hillfort (A. Berzovan).

C. Geographical positioning:

C.1. From geographical point of view, the site is located in the northern part of the Moldavian Plateau, more precisely on the eastern frame of the forested Dealul Mare massif. It occupies a long spur, delineated towards south, east and west by very steep slopes, detached from the wide plateau called the “Podișul de Lut” [The Clay Plateau], at an altitude of approx. 510–525 m. It dominates the lower surrounding areas by a few hundred meters of level difference, benefiting from a wide visibility area to the south, west but especially to the west, towards the Cotnari area. **C.1.a.** Currently, the terrain is covered by forest and pastures; **C.1.b.** The state of preservation is good, but there are some areas affected by logging.



Figure 140. Todirești-Dealul Șanțurilor hillfort. Aerial photo of the 1st defensive line (A. Berzovan).

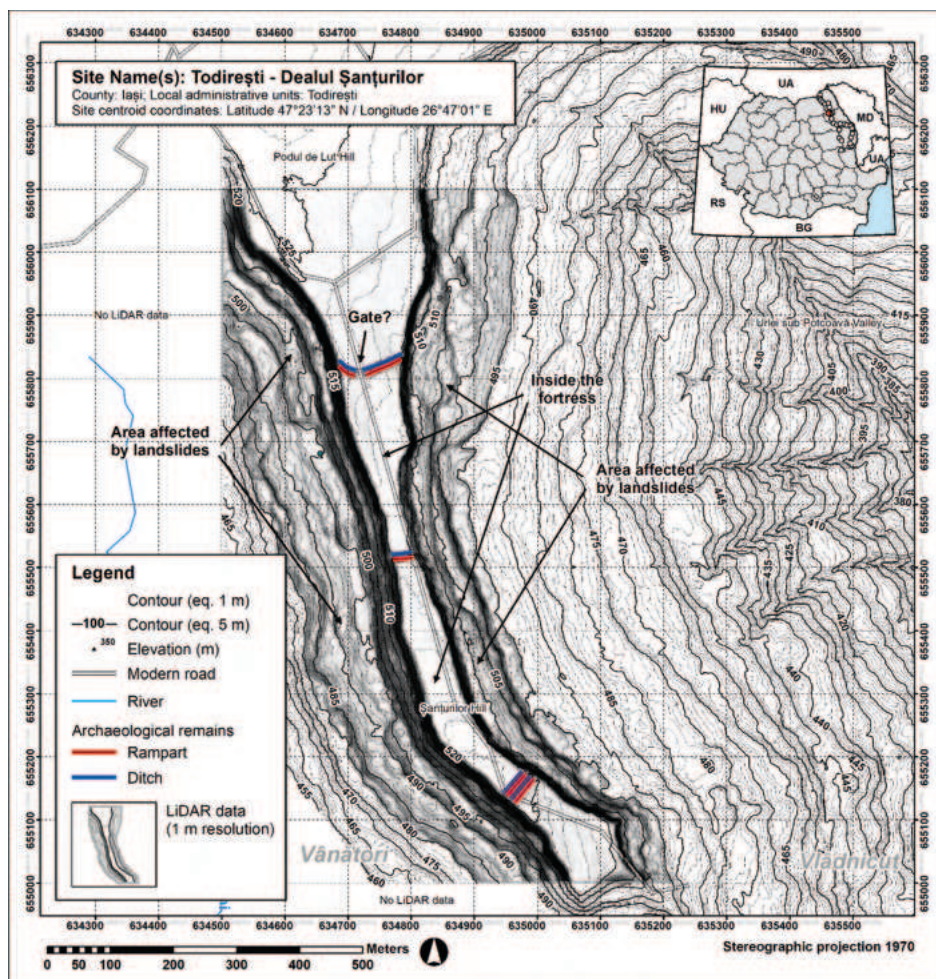


Figure 141. Todirești-Dealul Șanțurilor hillfort. Interpretation map.

C.2. In the immediate vicinity are several springs and brooks.

C.3. 47° 23' 13" N, 26° 47' 01" E.

C.4. Approx. 510–525 m.

C.5. Around 250–300 m.

D. Description

D.1. Enclosed plateau; three enclosures.

D.2. 5th–3rd centuries BC; D.2.a. Eneolithic (Cucuteni Culture).

D.3. Rampart with ditch.

D.4. Around 5.40 ha.

D.5. Description of the archaeological situation

The hillfort has three distinct enclosures, separated by ramparts and ditches. The site had no archeological researches, the existing data coming exclusively from repeated field surveys carried out since the 1980s. Given that the eastern and western edges of the plateau show traces of extensive landslides; it cannot be excluded that the fortress could have been larger.

The first rampart is around 2.50 m tall with a 2 m deep ditch. The second, located about 300 m behind it, presents a height of about 2.5 m with a ditch 3 m deep. The third is located 400 m behind the second, 2 m high with a 2 m deep ditch; immediately behind it is another one, poorly preserved. The existence of a rampart with a ditch in the southern extremity of the plateau is not certain. Dating and framing in the 5th–3rd century BC period was made based on the archaeological material collected from the surface.

E. Bibliography:

RAJ Iași II 1985, p. 401–402; Turcu 2002, p. 164; Berzovan 2017, p. 67–68.

III.1.35. Văculești-Cetate / Dealul Podiș (Botoșani County)

A. Văculești-Cetate / Dealul Podiș

B. Field survey by A. Berzovan and A. Kovács in 2021.



Figure 142. Văculești-Cetate / Dealul Podiș hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C.1. From geographical point of view, the site is located in the northern part of the Moldavian Plateau, more precisely on the eastern frame of the forested Dealul Mare – Culmea Bour massif,

in the contact area with the Jijia Plain, a region with steppe and forest-steppe characteristics. It occupies the northern end of the plateau called *Dealul Podișului*, in the area of the Văculești Forest, at an altitude of approx. 300–310 meters. It dominates with approx. 50–70 m in height the lower surrounding areas, with a fairly wide visibility to the north and northeast, to the area of Văculești commune. **C.1.a.** Currently, the terrain is covered by forest; **C.1.b.** The state of preservation is good, but there are some areas affected by logging.



Figure 143. Văculești-Cetate / Dealul Podiș hillfort (Google Earth).



Figure 144. Văculești-Cetate / Dealul Podiș. Rampart and ditch (A. Berzovan).

C.2. In the immediate vicinity are several springs and brooks.

C.3. 47° 52' 01" N, 26° 23' 38" E.

C.4. Approx. 300–310 m.

C.5. Around 50–70 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC.

D.3. Rampart with ditch.

D.4. 1.60 ha.

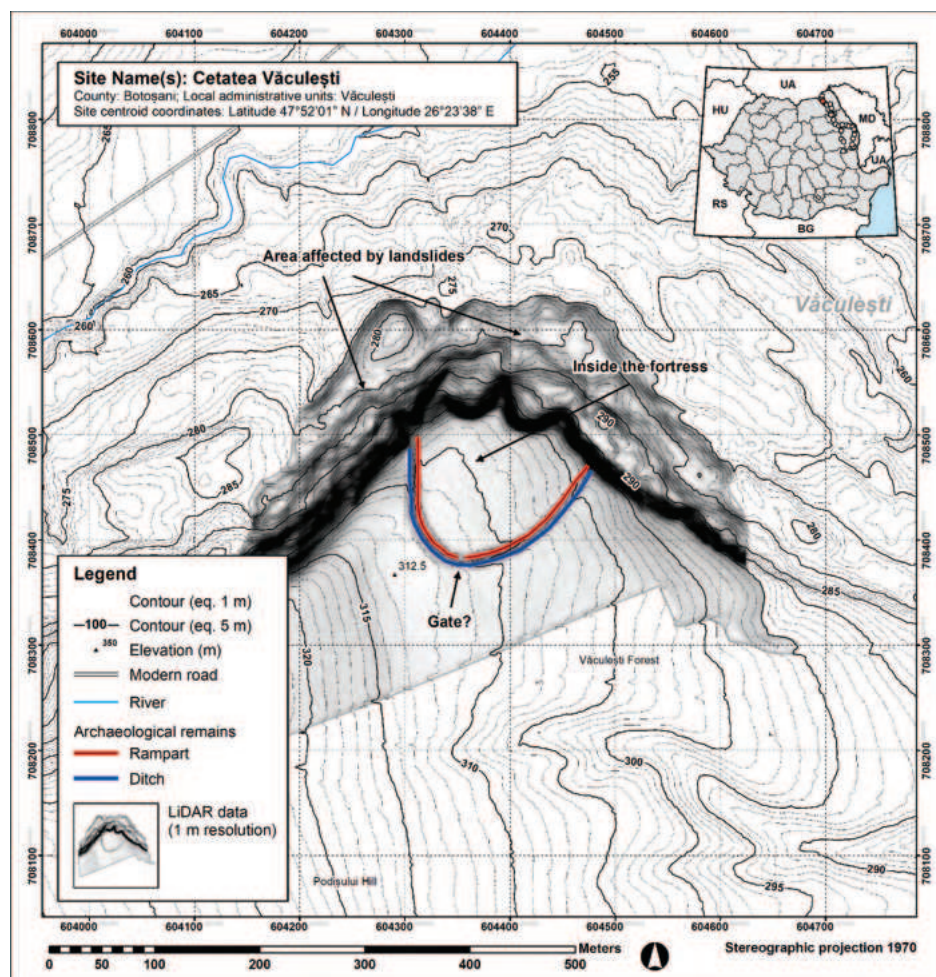


Figure 145. Văculești-Cetate / Dealul Podiș hillfort. Interpretation map.

D.5. Description of the archaeological situation

Although the discussed site was not known and described as such in the literature, there is information in older books that seem to refer to it. Alexandru Odobescu mentioned the existence in Brăiești (commune located south of Văculești) of a place in the forest called “*Vatra Tabără*” [Camp’s Hearth] which according to the local traditions was the camp of an army from older, immemorial times²⁸³. Nearby, another place is mentioned, called “*Palanca*” [The Fort], where according to the same legend, this ancient army kept its supplies²⁸⁴. Despite the fact that Odobescu’s data was discussed in the 1976 archaeological repertoire of the Botoșani County²⁸⁵, no surveys were made in the area so far.

The defensive elements consist of a rampart doubled on the outside by a ditch, of semicircular shape, enclosing the southern, eastern and western sides of the hillfort. The northern side was naturally defended, by steep slopes. The total length of the fortifications is approx. 290 linear meters. Regarding the dimensions of the fortification elements, the rampart has a base width of approx. 6–8 m and a preserved height ranging between 1.5–2 m. The ditch has an opening of approx. 6 m

²⁸³ Odobescu 1908, p. 154.

²⁸⁴ There is a place “*Palanca*” marked on military maps in the area of Brăiești and in that place there are also anomalies visible on the DEM.

²⁸⁵ RAJ Botoșani 1976, p. 59–60.

and a preserved depth of about 1–2 m. It is interesting to note an opening in the southern extremity; this could be the gate of the hillfort, but it could just as well be the result of modern interventions.

The field survey was greatly hampered by the rich vegetation and the abundant carpet of dead leaves. However, at the roots of overturned trees we were able to identify a series of small hand-made pottery shards, which can be framed with considerable certainty to the beginning of the Late Iron Age. Also, on the route of the rampart we could observe in some places the existence of burnt adobe fragments, which indicate the traces of a destroyed palisade.

E. Bibliography:

Odobescu 1908, p. 154; Berzovan, Kovács 2021.

III.1.36. Victoria-Șanțul Caterinei (Botoșani County)

A. Victoria-Șanțul Caterinei.

B. field survey by A. Păunescu and V. Chirica in 1976; field survey by A. Florescu (during the late 1970s); archaeological excavations by I. Ioniță, P. Șadurschi and O. L. Șovan in 1980; field surveys by A. Berzovan and A. Kovács in 2021.



Figure 146. Victoria-Șanțul Caterinei hillfort on 1:25 000 topographical map of Romania.

C. Geographical positioning:

C.1. The site is located in the northern part of the Moldavian Plateau, more precisely in the eastern sector of the so-called Jijia Plain. It has a somewhat atypical position, located on both sides of the Zarzărului brook. The altitudes oscillate between 165–195 m. The site covers a rather limited area of visibility. C.1.a. agricultural fields; C.1.b. The state of preservation is precarious; the objective is affected by intensive agriculture.

C.2. The closest source of water is Zarzărului valley, that traverses the site.

C.3. 47° 45' 25" N, 26° 47' 03" E.

C.4. Approx. 165–195 m.

C.5. -

D. Description

D.1. Hill-slope hillfort; single enclosure.

D.2. 5th–3rd centuries BC (?).

D.3. Rampart and ditch.



Figure 147. Victoria-Șanțul Caterinei hillfort on 1964 Corona satellite photo made by US Airforce (<https://earthexplorer.usgs.gov>).

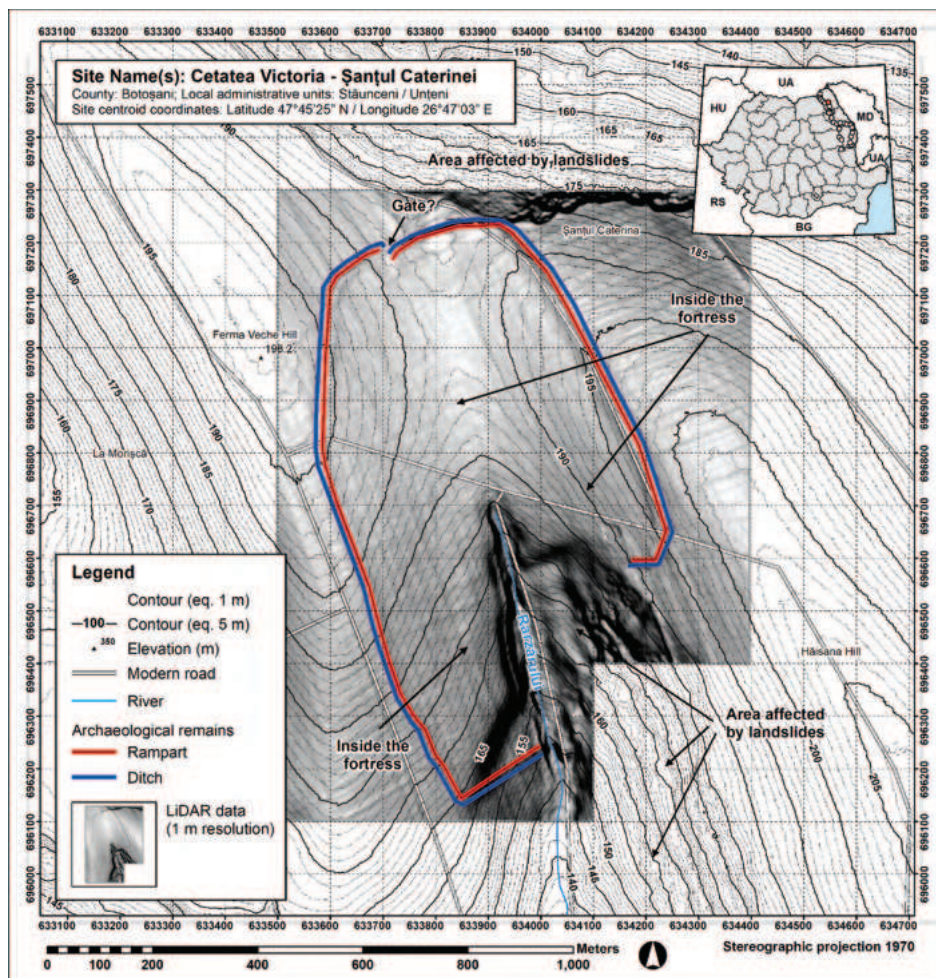


Figure 148. Victoria-Șanțul Caterinei hillfort. Interpretation map.

D.4. 43 ha.

D.5. Description of the archaeological situation

Reported on the maps from the 19th century, the site was first investigated in the field in 1976, on the occasion of the surveys for Archaeological Repertory of Botoșani County. In 1980, an archaeological test excavation was carried out by I. Ioniță, P. Șadurschi and O. L. Șovan. The trenches focused on the problem of the defensive system. Based on the results of the survey, the hillfort was dated in the 5th–3rd centuries BC period.

The hillfort has an approximately polygonal shape. A V-shaped entrance is visible in the north-western sector. In 1967, the rampart still maintained a height of approx. 0.75 m and the adjacent ditch reached a depth of approx. 0.50 m; today, due to intensive plowing, the defensive system is only visible in the form of a lighter strip of soil, with sporadic traces of ash and burnt adobe. The position of the hillfort is very curious; it occupies both sides of the Zarzărului valley, without benefiting from an extended area of visibility. A military purpose is doubtful. There are obvious similarities with the hillfort from Scobinți-Grădiștea (Iași County), see *above* in our repertoire.

E. Bibliography:

RAJ Botoșani 1976, p. 56; Turcu 2002, p. 170; Arnăut 2003, p. 276; Teodor 1999, p. 182; RAJ Botoșani 2016, p. 388; Florescu 2022, p. 60.

III.1.37. Vinderei-Cetățuia (Vaslui County)

A. Vinderei-Cetățuia.

B. Field survey by C. Mateescu in the 1940s; field survey between 1950s–1970s by Gh. Coman; field surveys by M. Oancă and M. Mamalaucă between 2012–2019; field survey by M. Oancă, M. Mamalaucă and A. Berzovan during 2020.



Figure 149. Vinderei-Cetățuia hillfort. Rampart and ditch.

C. Geographical positioning:

C.1. From geographical point of view, the objective is situated in the southern part of the Moldavian Plateau. It is located in the southern part of the Fălciului Hills, in an area with a lower relief energy, which has a hilly landscape. The point occupies the plateau of a secondary ridge bordered to the west, south and east by steep slopes, delimited by two tributaries of the Andonia brook in the Jăravăț basin, a tributary river of Bârlad. The altitude is approx. 280 meters, the point dominating with approx. 65–70 meters the lower neighboring areas from the south and east. The area of visibility is very wide, especially in the mentioned directions. **C.1.a.** Currently, the terrain is used as pasture; **C.1.b.** The state of preservation is good.



Figure 150. Vinderei-Cetățuia hillfort on 1:25 000 topographical map of Romania.

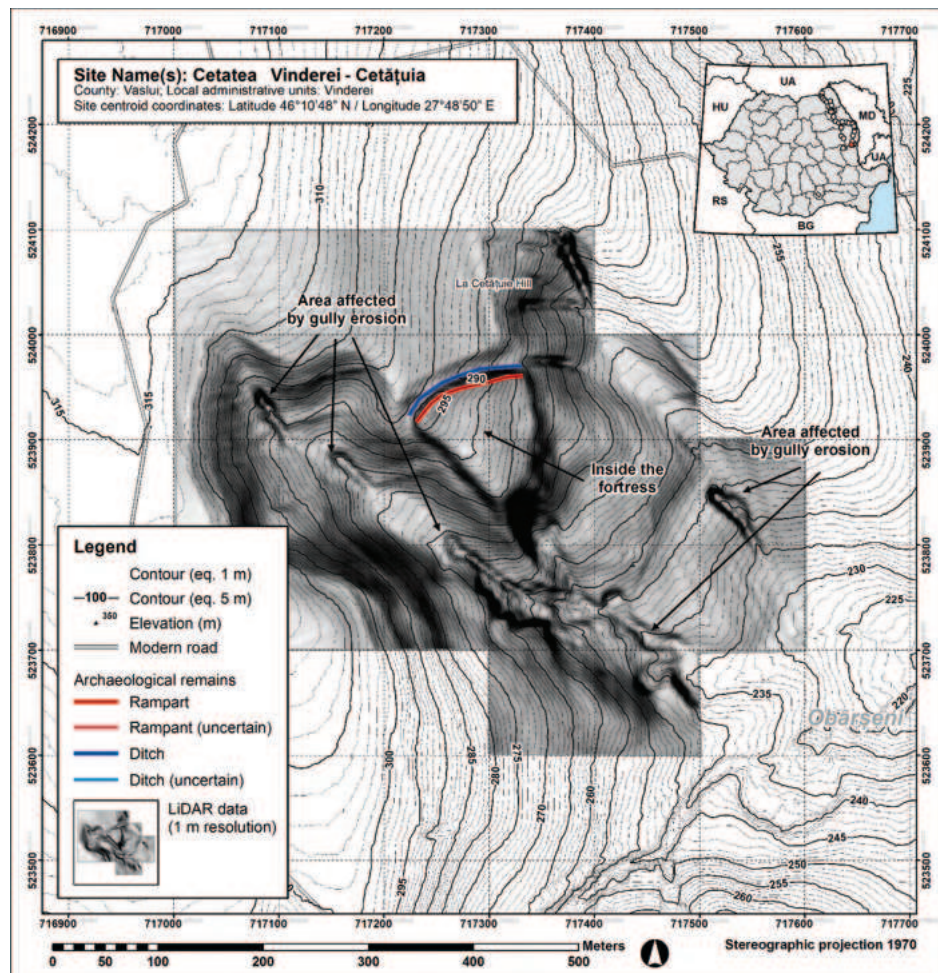


Figure 151. Vinderei-Cetățuia hillfort. Interpretation map.

C.2. In the vicinity are several springs and brooks.

C.3. $46^{\circ} 10' 48''$ N, $27^{\circ} 48' 50''$ E.

C.4. Approx. 280 m.

C.5. Around 65–70 m.

D. Description

D.1. Enclosed plateau; single enclosure.

D.2. 5th–3rd centuries BC (uncertain); **D.2.a.** Eneolithic (Cucuteni Culture).

D.3. Rampart with ditch.

D.4. 1.6 ha.

D.5. Description of the archaeological situation

The fortification elements – ditch and rampart – are located on the northern side, which connects with the rest of the plateau, the only one easily accessible from a military point of view. Slightly arched, the rampart and the associated ditch have a length of 214 m, enclosing an area of approx. 1.6 hectares. The rampart has a current height of approx. 3–4 meters and a base width of 7–8 meters; the ditch, a depth of 1.5 m and a width of 5–6, the dimensions being more pronounced in the central area. In the centers is also visible a possible entrance gate.

The site is known in the literature, especially due to the discoveries belonging to the Cucuteni Culture²⁸⁶. In 2019, the citizen Păduraru Nicu Andrei donated to “Vasile Pârvan” County Museum from Bârlad two “Scythian” – type bronze-arrowheads, discovered somewhere near the site. This fact determined us to consider the possibility that the hillfort was built during the 5th–3rd centuries BC, over an older Eneolithic settlement. Of course, in such situations the final verdict can only be given as a result of archeological excavations, which is why we decided to keep this site in our repertoire with certain reservations.

E. Bibliography:

Mateescu 1944, p. 54; Brudiu 1970, p. 523; Ursulescu 2018, p. 266; Berzovan *et alii* 2020a.

III.2. Addenda et Corrigenda

The archaeological literature mentions the existence of a number of hillforts, attributing them to our period of interest, but whose existence on the field we could not confirm despite repeated verifications. Added to these, are a number of fortified sites whose functional chronological framing is, in many ways, highly problematic. Certainly, the inclusion of these sites with all the associated discussion in the actual repertoire would have been confusing for the reader; on the other hand, we consider it necessary to discuss them at least briefly, in order not to leave room for ambiguity. Of course, we hope that future researches might bring the necessary clarifications.

* * *

For the territory of Iași County, we have encountered several such situations. A first uncertain situation – which we discussed as such in our 2019 study, concerns the fortification from Mogoșești, mentioned since the 19th century by Dionisie Fotino who saw here the ruins of the ancient *poleis* Marcodava. In general, the data mentioned by Fotino was considered to be related to the archaeological site from “Dealul Bățului”, out of which a rich Late Iron Age materials was recovered (especially pottery). N. Zaharia mentions for this site the presence of defensive ditches²⁸⁷, but later researches made in 1980s no longer confirmed the presence of the said fortification elements²⁸⁸. Since 2017 we made repeated field surveys in the area of Mogoșești, but without conclusive results²⁸⁹. In 2022, as a result of information received from dr. M. Niculiță (Alexandru Ioan Cuza University of Iași), it was possible to identify, in the area of Galata Hill, close to the forestry chalet, an area with

²⁸⁶ Mateescu 1944, p. 54; Brudiu 1970, p. 523; Ursulescu 2018, p. 266.

²⁸⁷ Zaharia *et alii* 1970, p. 208–209.

²⁸⁸ RAJ Iași I 1984, p. 244.

²⁸⁹ Our preliminary observations in Berzovan 2019, p. 49–50.

anthropic interventions that very much resemble ditches and ramparts²⁹⁰. Their manmade origin is quite obvious. Could these anomalies indicate the traces of a *vestigial hillfort*? Unfortunately, at this moment it is difficult to give any answer since despite our insisitencies, we could not find any kind of relevant archaeological material on the surface.

* * *

Regarding the so-called “Cetățuia” hillfort from Valea Ursului, Miroslava commune (Iași County)²⁹¹, it is an error within the archaeological repertoire of Iași county, as M. Ciubotaru showed in the review dedicated to the said repertoire²⁹². The authors confused Valea Ursului (commune from Neamț County) with Valea Ursului village from Iași. Probably a similar confusion rests at the basis of the information about the existence of an alleged hillfort, or “*Geto-Dacian oppidum*” (sic!) at Ciurbești (Miroslava commune)²⁹³.

* * *

In 2017, we received an information from the late professor Vasile Chirica about the existence of a possible hillfort in the area of Vlădiceni village (Tomești commune, Iași County), located not far away from the Vlădiceni Monastery. In the same year, together with Paul Popistaș, a local history enthusiast, we made multiple field surveys on the entire territory of the village, without any relevant result.

* * *

At Comarna-Pădurea Musteață (Iași County) is mentioned the existence of a possible “*Geto-Dacian hillfort*”, found in a survey led by local schoolteacher E. Cojocaru and V. Chirica²⁹⁴. In 2021, together with our colleague from the Iași Institute, dr. Sever Boțan, we conducted extensive field surveys in the area. On this occasion, we found out that there is no data to support the existence of a hillfort in this place.

* * *

On the occasion of the field surveys carried out in order to map the hillfort from Todirești-Dealul Șanțurilor (Iași County), a small ditch was observed on a neighboring spur called “Dealul Măngălăriei”, followed by a small, flattened rampart. It is possible that here was a second fortress, but due to the abundant vegetation we could not recover archeological material and we decided to keep a certain dose of caution²⁹⁵.

* * *

The so-called hillfort at Târzii-Dealul Stana (Vaslui County), mentioned by A. C. Florescu²⁹⁶ is in fact not a hillfort, but a different kind of monument²⁹⁷, of an unknown type and functionality.

²⁹⁰ They are very different from the other WW2 ditches and trenches visible in the area. The fact that old trees grow of them indicate that the structures are *at least* 50–60 years old.

²⁹¹ RAJ Iași I 1984, p. 239.

²⁹² Ciubotaru 1986, p. 453–454.

²⁹³ Mentioned in Iațcu 2015, p. 89.

²⁹⁴ RAJ Iași I, 1984, p. 88.

²⁹⁵ When we edited the work of A. C. Florescu, we mentioned this site on one of the maps inserted in the plates (Florescu 2022, Pl. 30/2).

²⁹⁶ Florescu 2022, p. 59–60 (with our notes and observations).

²⁹⁷ See the discussion in Berzovan *et alii* 2020a

* * *

About a hillfort at Căiata – *Movila Mare* (Sihlea commune, Vrancea County) we learn from the works of archaeologist Victor Bobi. Together with A. C. Florescu, Bobi made a number of field surveys in the area. According to the description, in the point “*Movila Mare*” there is an “*early Geto-Dacian settlement, fortified with rampart and defensive ditch. It has the shape of a triangle with its sides curved inwards, having an entrance at each corner*”. Furthermore, he mentions that the rampart is burned, and that “*Late Hallstatt and early Latene*” pottery was found²⁹⁸. The data about the existence of an early Late Iron Age hillfort here was taken in other works by other authors²⁹⁹.

Our field surveys conducted in the area together with our colleagues from the Vrancea County Museum from Focșani (A.-E. Apostu and A. Nicodei) had brought us in face of an interesting archaeological structure. It is in the form of an approximately irregularly shaped enclosure, with a diameter of approx. 70 × 60 m, surrounded by a “rampart” with a width that reaches in some places 23 m and a height that oscillates between approx. 1.5 m and 7–8 m to almost 10 m in the southeast sector. The interior of the enclosure is not flat, being marked by numerous unevenness, of variable magnitude. Like our predecessors, we had found in the northern part traces of burned clay.



Figure 152. Căiata-Movila Mare (Sihlea commune, Vrancea County). Aerial photography (A. Berzovan).

²⁹⁸ Bobi 1999, p. 52.

²⁹⁹ For example Arnăuț 2003, p. 197.

From the first sight it became clear that we were not in front of a “fortified settlement” but in front of another type of monument. Was it a destroyed tumulus? This hypothesis is supported at first sight by the circular shape and the existence of the “crater”, visible in many other monuments of this type that suffered over time interventions from treasure hunters. However, the sheer dimensions (both the diameter and the preserved height) indicate that if we are in front of the ruins of a funerary mound, it would have had impressive initial dimensions, significantly larger than most tumular monuments known for the Carpatho-Danubian area.

Local tradition states that this monument was erected as a fortress by the Ottoman Turks in the 17th or 18th century. However, the objective is attested as such in historical sources since 1507, as a “mound” and not as a fortification. Thus, describing the route followed by the armies of Bogdan Vodă of Moldavia who was attacking Radu Vodă of Wallachia. Thus, the so-called “*Letopisețul lui Ștefan cel Mare*” (The Chronicle of Ștefan cel Mare) mentions that “*in the year 7015 (1507), 28th October, Ion Bogdan voievod entered into Wallachia with all its armies, at the village Rătedzații, at Căiata Mound, on the other side of the Râbna*”³⁰⁰. Nicolae Costin speaking about the same event, mentions that “*gathering his hosts, bringing into his help the Szeklers, they entered into Wallachia at Căiata Mound, across Râmna and at Rătezați*”³⁰¹.

These mentions show us that we are in front of an old monument, possibly “remodeled” at a later date. Clarifications will only come as a result of invasive archaeological research; it is certain, however, that at present moment maintaining this objective among the list of hillforts of the early period of the Late Iron Age is not justified.

* * *

Information about the existence of a hillfort at Nereju (Vrancea County) dated in the 5th–3rd century BC period, we find in the work of V. Bobi, where we are told that it would be located on a prominent height southwest of the commune, at a distance of approx. 2 km. As “arguments” the author mentions that he discovered at the foot of the slope, several processed stone blocks, including two having incised spiraled ornaments. The site was allegedly found by V. Bobi and Gh. Constantinescu between 1962–1970³⁰². Other information is not given, except a photography of the mountaintop on which the fort is supposedly located³⁰³ and an image of the ornate stone blocks³⁰⁴. The information was taken over in later scientific works dealing with Late Iron Age hillforts.

Our field survey conducted in 2021 together with the colleagues from the Vrancea County Museum (A.-E. Apostu, A. Nicodei), led us to the conclusion that the mountaintop photographed and presented by V. Bobi is Titila (808 m). Our survey on this massif, despite its favorable, prominent position and suggestive name³⁰⁵, has not led to the discovery of any signs of fortification. Furthermore, research into the archives of the Vrancea Museum brought to light further information: the incised stones were in fact discovered accidentally *by the locals* not at the foothill of a mountain, but in a valley, in Crăciunari / Secăturile lui Bucur area, during the digging of a well, together with other remains of “old stone walls” with no mortar. Verification on site was made by Anton Paragină.

³⁰⁰ “În anul 7015 [1507], octombrie 28, a intrat domnul Ion Bogdan voievod în Țara Muntenească cu toți oștenii, la satul Rătedzații, la movila Căiata, de ceea parte a Râbnei” („Letopisețul de când s-a început Țara Moldovei” – Letopisețul lui Ștefan cel Mare, ed. Gh. Mihăilă, p. 50).

³⁰¹ “sculatu-s-au cu puterea armelor sale, trăgând agiutoriu și pre Săcui, și au intrat în Țara Munteniască pre la Movila Căiatei, peste Râmna și pe la Rătezați” (N. Costin, Letopisețul Țării Moldovei. Dela zidirea lumii până la 1601, ed. I. Petre, p. 330).

³⁰² Bobi 1999, p. 60.

³⁰³ Bobi 1999, pl. IX/2.

³⁰⁴ Bobi 1999, pl. Pl. XXXIX.

³⁰⁵ The term “titila” is a regionalism with obscure origins (possibly Latin or substratum) from north-western Wallachia and south-western Moldavia that designates a prominent mountain or hilltop. In Vrancea county at least there is a strong association of this toponym with archaeological sites from various epochs.

In the light of the above, it is quite obvious that we are dealing with the result of an unfortunate confusion. In regard to the stones and the spiraled incisions, they could be anything, from ethnographic artifacts to *stelae* from the Bronze Age Monteoru Culture. But the fact that they were discovered during the digging of a well, at a significant depth, make us believe that the artefacts are rather prehistoric.

* * *

In regard to the site from Odobești-Măgura *Odobeștilor / Șarba*, data about the existence of an early Late Iron Age hillfort come from the work of V. Bobi. The hillfort is described by V. Bobi as being defended with a large, semicircular rampart and two defense ditches. A sketch of the objective³⁰⁶ and a stratigraphic profile³⁰⁷ are also presented.

The field archeological research carried out together with colleagues from the Vrancea County Museum did not have the expected results; although we could identify the archeological site, we could not pinpoint exactly the actual location of the fortification. And there are more reasons for caution, to be found not just on the field, but also in the stratigraphic section published by V. Bobi. The presence of Medieval ceramic material near the bottom of the ditch raises serious questions about the actual dating of this objective. For all these reasons, we consider that it is not justified to keep this site on the list of early Late Iron Age hillforts.

³⁰⁶ Bobi 1999, pl. XXI.

³⁰⁷ Bobi 1999, pl. XXII.

■ CHAPTER IV. THE HILLFORTS IN THE EAST- CARPATHIAN LANDSCAPE

IV.1. Spatial distribution

Mapping the sites gives us the opportunity to make a series of observations related to their geographical location and areal distribution (see **Pl. 1**). A first thing that stands out is that most of them are located in the plateau areas east of the Siret Corridor, their presence west of this river being – as of now – completely sporadic, reduced to only three sites: Merești, Dochia and Căndești, with the last two reusing older, Early Iron Age habitations. Blaming this situation on the current stage of research cannot be, in our opinion, a valid argument: although Vrancea and Bacău counties have been surveyed superficially, Suceava and Neamț Counties have been relatively well investigated, the latter especially in the recent period³⁰⁸. Thus, we can safely affirm that the center of gravity for the East Carpathian hillfort phenomenon lies to the *east of Siret*.

In this regard, we cannot neglect the situation existing on the current territory of the Republic of Moldova, where we know a large number of such sites, most of them reliably dated in the 5th–3rd century BC³⁰⁹. As such, a larger picture of a massive “hillfort cluster” emerges, suggesting a relatively unitary materiality, extending over a large area, delimited to the west by the Siret and to the east by the Dniester River, with sporadic effusions beyond these natural borders. The total number of sites both east and west of Prut river is over 130³¹⁰, signaling one of the most significant concentrations of hillforts in Europe at that time in a given space, and probably the greatest concentration of such monuments that the Carpatho-Dniestrian area had known in any historic or prehistoric epoch.

We might wonder why did the people of this period not anchor themselves to the Eastern Carpathian Mountains, which could have provided additional shelter against nomadic incursions, or to the region of the Subcarpathian hills, the latter so rich in salt resources known and exploited since earliest prehistory³¹¹. Were those regions dominated by hostile populations, maybe of a different ethnicity, limiting the westward expansion of the hillfort builders? There is little evidence for such a scenario; on the contrary, across the mountains, in the depressions located to the west of the Eastern Carpathians, for the period of the 4th–3rd centuries BC, there are archaeological vestiges similar to those in our region of interest³¹². Of course, similarity in materiality, rituals, types of settlements does not necessarily imply ethnic and linguistic identity³¹³, and even less a political one, but we have no reason to believe that hostile relations existed between these groups. The coming (around 350 BC) of Latene “Celtic” groups in the Transylvanian depression area does not seem to have affected to a

³⁰⁸ See for example Diaconu 2012; Diaconu 2019.

³⁰⁹ Zanoci 1998; Arnăuț 2003; Haheu 2008; Levinschi 2015 and others. Chronology was deducted mainly on the basis of imported Greek Amphorae; recently C14 datings on samples taken a number of hillforts from the Saharna microregion confirms the data offered by the amphoristic material (Zanoci, Băț 2021).

³¹⁰ Haheu 2020, p. 121.

³¹¹ See the discussion in *Chapter I*.

³¹² For ex. Sirbu *et alii* 2008.

³¹³ About this theoretical problem, see the discussion in Zugravu 2012.

large degree the regions from the western slopes of the Eastern Carpathians, that remained more or less dominated by local groups for yet another century or so.

We believe that, more likely, a preference for a certain type of habitat, specific to the contact area between the hilly forest-steppe and the steppe itself, attracted and at the same time allowed a certain economic and demographic development that ultimately generated the social and political aggregation necessary for the building of hillforts. The existence of fertile soils could also have played a role – chernozems appear especially east of the Siret – thus offering conditions for agriculture (and demographic growth). For various reasons, such processes did not happen at that time in the Eastern Carpathian Mountains, even if the area was rich in other kinds of natural resources³¹⁴.

Analyzing closer the spatial distribution of the hillforts, both in the Romanian territory and in the one east of the Prut, we observe a series of similarities, but also differences, the latter, in some cases, quite significant. Regarding similarities, in both areas, the sites are located (mainly) in hilly and forested areas and they are almost completely absent in the plain and steppe areas. The Bălți Plain from the northern Republic of Moldova seems to be largely devoid of such monuments, and in the Jijia Plain there are only two of them – Scobinți-Grădiște and Victoria-Șanțul Caterinei, both with questionable functions, located at the western extremity of this landform, in the vicinity of the hill and forest area. Were the Jijia Plains dominated by other populations in this period? As the area is covered by a significant amount of tumuli – poorly or very poorly researched up to this day – it cannot be excluded that future investigations into these monuments might bring to light nomadic “Scythian” burials from our period of interest. On the other hand, sporadic presence of local settlements – mostly indicated by field surveys³¹⁵ – and discoveries such as the necropolis from Strahotin – Ponoare (Botoșani County), in which the absolute majority of graves are of “North-Thracian” tradition³¹⁶, point to the presence of locals in these areas, at least west of the Prut.

The plain of the lower Siret is also devoid of hillforts, as is the Bugeac steppe, located in the south of the Republic of Moldova and the southwestern extremity of Ukraine. In the latter areas Scythian groups were present in the 4th–3rd centuries BC, besides local groups³¹⁷. That we are speaking of an effective Scythian presence in the Bugeac, and not of sporadic penetrations, is proven by the presence of the tumular monuments which yielded nomadic graves with an inventory reliably dated in this interval³¹⁸. In any case, it is needless to say that the idea of a “strict border” between North-Thracian and Scythian groups, an idea sometimes present in older literature, cannot be supported anymore nowadays.

Southwards, across the Bărăgan plain, there seems to be a gap of about 150–180 km between the East-Carpathian hillfort area and those from the region of Lower Danube and Northern Bulgaria, which apparently form a cluster of their own. Needless to say, despite the obvious convergences in material and spiritual culture visible in the entire area, this makes the idea of a single “Getic” kingdom or unique tribal faction, dominating the whole space, from the extremities of the Moldavian Plateau to the northern foothills of the Stara Planina, highly unlikely.

Where was the northern limit of the phenomenon? For the Pruto – Dniestrian area, the northern limit seems to have been around the hillfort cluster having in its center the fortification of Rudi – *La Șanțuri* (Sorocea Raion). For the East-Carpathian Romanian region, the northernmost hillfort is the one at Ibănești-Măgura Ibăneștilor (Botoșani County), located 7 kilometers from the modern border with Ukraine. If we look further north, into the region of nowadays Northern Bukovina (Chernivtsi

³¹⁴ Interestingly enough, in the so-called “classical period” of the later Dacian kingdom (2nd century BC – 1st century AD) a reverse phenomenon occurred, with the most intensive habitation being located to the west of Siret, the area between Siret and Dniester remaining sparsely inhabited in the period between the disappearance of the Poieniști – Lucașeuca culture (around the middle of the 1st century BC) and the early 2nd century AD.

³¹⁵ See plenty of examples in RAJ Iași 1984; RAJ Iași 1985; RAJ Botoșani 2016.

³¹⁶ Berzovan *et alii* 2020c.

³¹⁷ Vančugov *et alii* 1999, p. 117–134; Vančugov *et alii* 1999a, p. 135–222; Vančugov *et alii* 1999b, p. 223–278.

³¹⁸ Sirbu, Trohani 1997, p. 519; Kașuba 2010, p. 470; Ciobanu *et alii* 2018, p. 81–118; Topal *et alii* 2019, p. 13 and others.

Oblast), the published data regarding discoveries from the 5th–3rd centuries BC are not very conclusive at this moment³¹⁹. Thus, for the moment it is safe to say that the north-western limit of the phenomenon coincides roughly with the modern border between Romania and Ukraine.



Figure 1. Map of the eastern part of the Carpatho-Danubian area during the 5th–3rd centuries BC. Note: for the area between Prut and Dniester only the most important sites were mapped.

In the area east of the Prut, the fortresses were generally built near the rivers³²⁰: Răut, Botna, Bâc, the largest concentrations being found alongside the middle Dniester River³²¹. It is quite obvious that these agglomerations – significantly larger than anything known to the west of the Prut³²² – likely arose from

³¹⁹ In some works we found mentioned two hillforts at Rukhotin (Chernivtsi Oblast), on the southern bank of the Dniester, attributed to the early phase of the Late Iron Age: Ruhotin – *Turkish Ramparts* and Ruhotin – *Zamca* (Arnăut 2003, p. 257; Andronic 2008, p. 212–213; Zancoci 2011, p. 120–121; Levinschi 2015, p. 46 and others). The primary information comes from the test-trenches and surveys made by archaeologist Boris Anisimovich Timoschuk (see Тимошук 1974, p. 21–23). However, as shown in more recent bibliography, Ruhotin – *Zamca* hillfort belongs rather to the Early Middle Ages (see for ex. Калиниченко 2017, p. 78–70), while the dating of the large, circular hillfort is unclear – Early Iron Age (Завірії 2011, p. 11–17), possibly synchronous with the Early Scythian period (Дараран 2017, p. 421). S. Czopek in its turn correlates it with the West Podolian Group (Czopek 2020, p. 79, Ryc. 2). In any case, for the moment we believe there are no convincing arguments to attribute these two sites to the “Getic” culture or to the East-Carpathian hillfort cluster.

³²⁰ Никулиця 1977, p. 42–43; Levinschi 2015, p. 48–51.

³²¹ Zancoci, Băț 2017, p. 6–31.

³²² For example, if the cluster near the Cotnari region consists of six hillforts, the one in the Saharna microregion on the Middle Dniester is made up of no less than 16 sites, having in its center the Saharna Mare hillfort (see Zancoci *et alii* 2019, p. 317–320; Zancoci, Băț 2020a, p. 152–173). In a larger sector of the Middle Dniester, from Horodiștea to Climăuții de Jos, 40 hillforts are attested (Zancoci, Băț 2017, p. 6–31), which is more than the entire number of such sites to the west of Prut!

the need to control river traffic, but also to defend the main fords from aggressors coming from the east, probably steppe nomads. It is also important to notice that some of these Dniestrian clusters have, in many cases, antecedents in the Early Iron Age³²³. This suggests if not a (debatable) continuity of habitation, at least a continuity of aggregation processes built upon the same specific social and economic needs, something which is not visible in the areas to the west of the Prut, where the distribution of Early Iron Age forts does not correlate strongly with those of the 5th–3rd centuries BC³²⁴.

Furthermore, to the west of the Prut all forts are located at a distance from the main rivers, occupying in general the interfluvies. For example, until this date there is no knowledge of any fortifications that can be certainly dated to the 5th–3rd centuries BC in the Siret valley³²⁵, neither on Jijia, Bârlad, or Bahlui. As for the Prut, although the right bank offered enough favorable places for the construction of fortresses, the ones known are at a distance of at least 4–5 km (in straight line) or more from the course of this river, without clear visibility to its course. Interestingly enough, the left banks of Prut also seem to be devoid of such sites. So, at first glance it seems that, regarding hillfort positioning, other conceptions and (probably) other needs existed west of the Prut compared to the Prut-Dniestrian area.

IV.2. Hillforts and landforms. An attempt of classification

Returning to the analysis of the sites from our area of interest, we can observe that they are located at absolute heights between 100 and 520 m, with their majority clustered between 200 and 300 m. From a topoclimatic point of view, they are located more or less in the same climate, with minor climatic differences due to latitude or altitude.

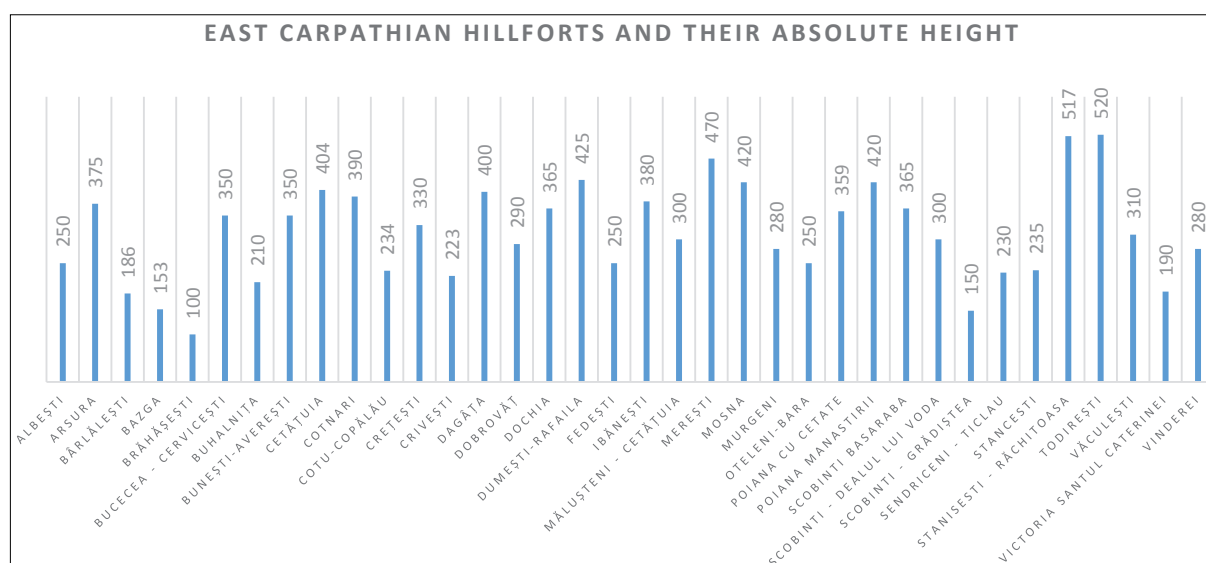


Table 1. East Carpathian hillforts and their absolute height (maximum height inside enclosure taken into account).

³²³ Niculiță *et alii* 2013, pp. 351–372; Niculiță *et alii* 2013a, p. 295–314; Niculiță *et alii* 2016, p. 203–215; Niculiță *et alii* 2016a passim; Zancoci *et alii* 2017, p. 7–46; Niculiță *et alii* 2019, p. 253; Zancoci 2021, p. 96–99.

³²⁴ Only the hillfort of Dochia-Cetățuia Sărățica seem to begin in the Early Iron Age (Bolohan 1994, p. 22; Bolohan 1999, p. 37–39; Bolohan 2000, p. 37–39) but the limited amplitude of the excavations does not permit us to enter into further details. For the issue of Early Iron Age hillforts in the East Carpathian Region and their distribution, see Popovici, Ursulescu 1982, p. 23–27; Lazanu 2006, p. 18–27; more recently Berzovan *et alii* 2021, p. 54–69 with the bibliography.

³²⁵ All of the three sites of Brad, Răcătău and Poiana, important residential centers in the 1st century BC – 1st century AD, had been inhabited during the 4th–3rd centuries BC, but there were no functioning fortifications in that time. For Brad, V. Ursachi mentions that the habitation levels of the 4th–2nd centuries BC “used the old fortification, without giving much attention to it (sic!) since they built dwellings on the rampart itself, flattening it” (Ursachi 1995, p. 99; see also Hânceanu 2021, p. 368; Hânceanu 2021, p. 183). The same situation seems to have happened in the site of Răcătău, where during the 4th–2nd centuries BC, the prehistoric fortifications were apparently abandoned (Ursachi 1995, p. 104); the fortifications of the major residential center of Poiana apparently functioned only during the 1st century BC (Vulpe, Teodor 2003, p. 40–41).

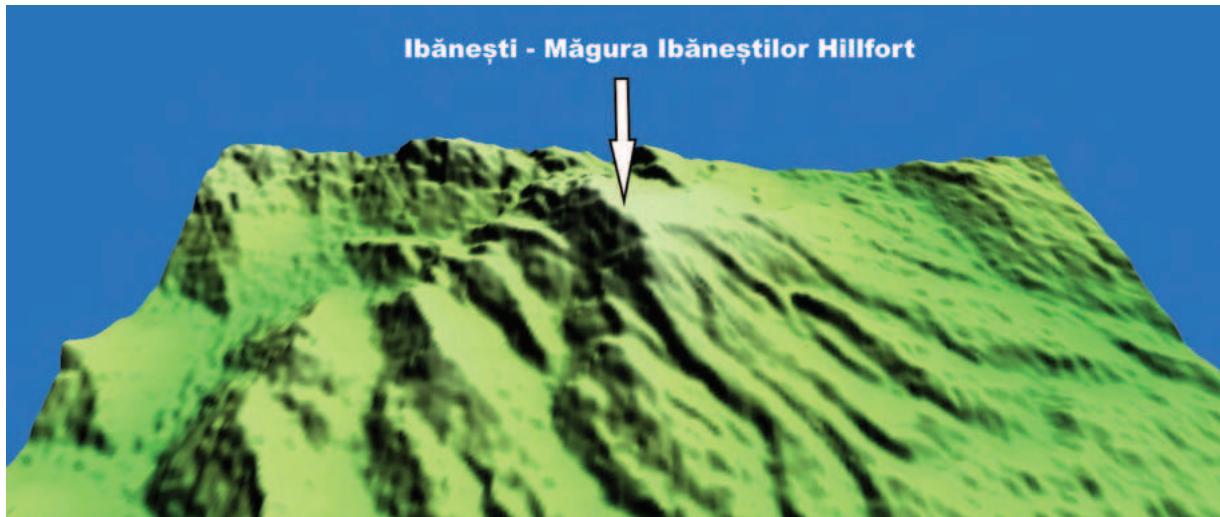


Figure 2. The position of Ibănești-Măgura Ibăneștilor hillfort. 3d view of the area with vertical exaggeration.

Analyzing the positioning and characteristics of the sites allows us to make a series of further observations and even classifications, related to the landforms on which they are located.

The first category is that of *hilltop forts*. These are located on prominent heights and plateaus, with obvious strategic value, that offer a large viewshed. The usable / habitable surface of the plateau or hilltop coincides more or less with the surface of the hillfort itself. This category includes hillforts such as that of Scobiști-Dealul lui Vodă, Ibănești-Măgura Ibăneștilor, or Enclosure A of the Cotnari-Cătălina hillfort. The military advantages of these positions are more than obvious; regardless of the direction of attack, an enemy had to climb a long and often steep slope. Their vulnerability resides mainly in the relative lack of usable water sources. Furthermore, their position exposed to winds might make them less favorable for permanent large-scale habitation.

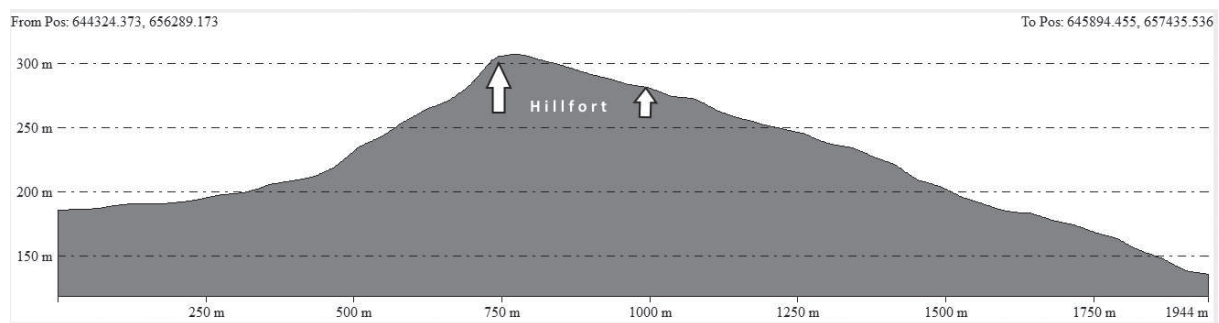


Figure 3. Vertical profile showing the position of Scobiști-Dealul lui Vodă hillfort (made on a DEM with a 30 m resolution; image presents vertical exaggeration).

The second category – including most of the sites – is the so-called *enclosed plateau* type. In this case, the hillfort occupies only a certain part – usually the edge or a corner – of an otherwise much larger plateau. The plateaus can be dominant or low lying. The hillfort can be protected on three sides by inaccessible slopes (e.g. Todirești-Dealul Șanțurilor), on two sides (Cotu-Copălău), or only on one side (e.g. Văculești – La Podiș), the other(s) being defended artificially with one or more lines of defense. However, if the slopes delimiting the plateau are not very steep, artificial enclosing can occur on all sides (for example at the second fort of Stâncești, and probably at Oțeleni / Bâra). The advantages of these forts are multiple. The nearby unenclosed plateau could have been used for various other activities, including agriculture or animal husbandry. At Crivești hillfort, as shown by archaeological excavations from 2021, the nearby plateau was (sparsely) inhabited and used up to a distance of 500 m from the fort itself. The presence of open-air hearths and various provision and

dump pits, but also two features that can be considered cultic – an atypical burial of an adolescent and a depositional pit – suggest a plethora of activities (domestic, cultic) happening in the immediate hinterland of this particular fort. Of course, we cannot extrapolate the situation from Crivești to other forts, but future archaeological excavations in the hinterland of other *enclosed plateau* type hillforts might bring additional information.

To the considerations mentioned above, we must add another observation. Having a large, open plateau in front of a hillfort is an obvious vulnerability, as it can serve as camp and staging ground for a siege.

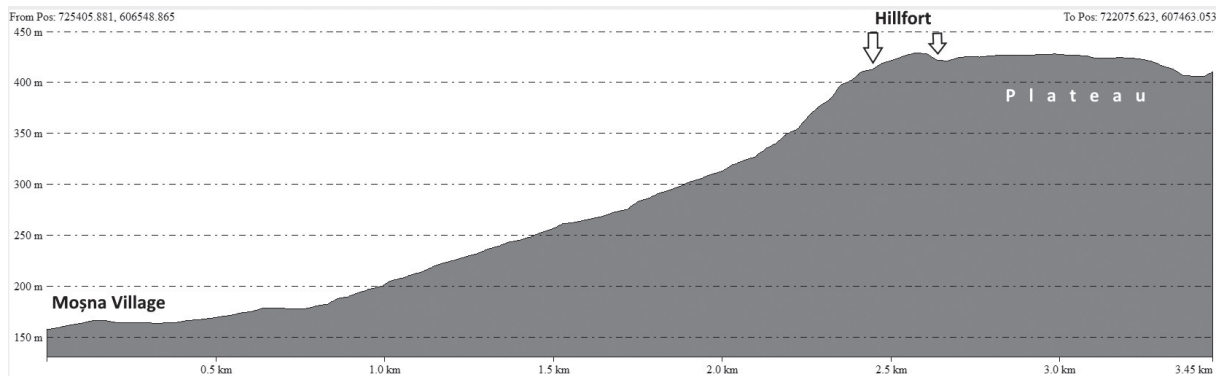


Figure 4. Vertical profile showing the position of Moșna-Cetate hillfort (made on a DEM with 30 m resolution; image presents vertical exaggeration).

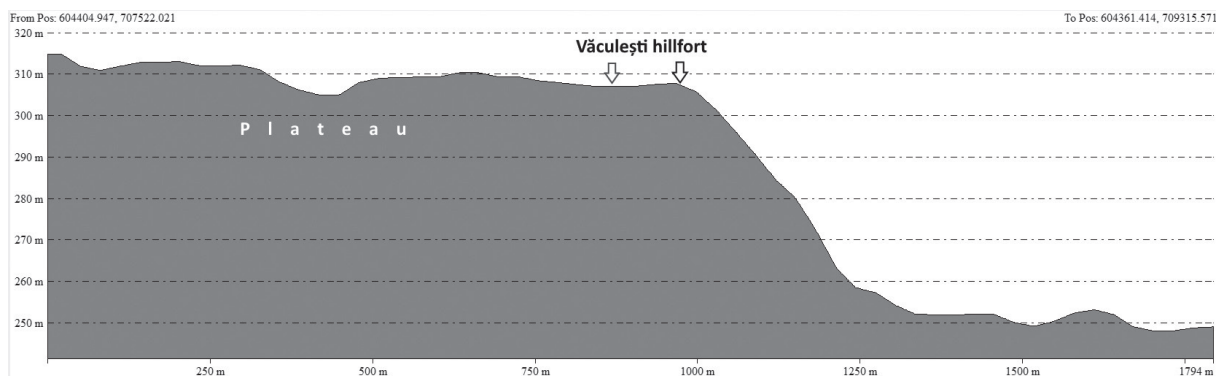


Figure 5. Vertical profile showing the position of Văculești-Dealul Podiș hillfort (made on a DEM with a 30 m resolution; image presents vertical exaggeration).

The third category, represented only by a few examples, is that of the so-called *hill-slope forts*. The sites are located on the slope of a hill, or even close to the bottom of the valley. Their viewshed is generally limited only to the neighboring areas. The ones from Buhalnița, Bazga, Bârlălești and Scobinți – *Basaraba* are part of clusters, having other sites nearby, at distances no greater than 1.5–3 km, and they could have had a specific role, serving maybe as annexes or outposts. Sites such as Albești-Cetățuia are, however, more or less isolated; what we know, from the 2021 excavations, is that it was inhabited and had functional dwelling structures, even if apparently they were used for a relatively short time. Other sites, such as Victoria – Șanțul Caterinei or Scobinți-Grădiștea, located in the Jijia Plain, encompassing in their enclosed surface a small stream or a source, due to their large size and peculiar shape, most likely served other purposes than strict military defenses and the same could be inferred for the Dochia-Cetățuia Sărățica fort as well.

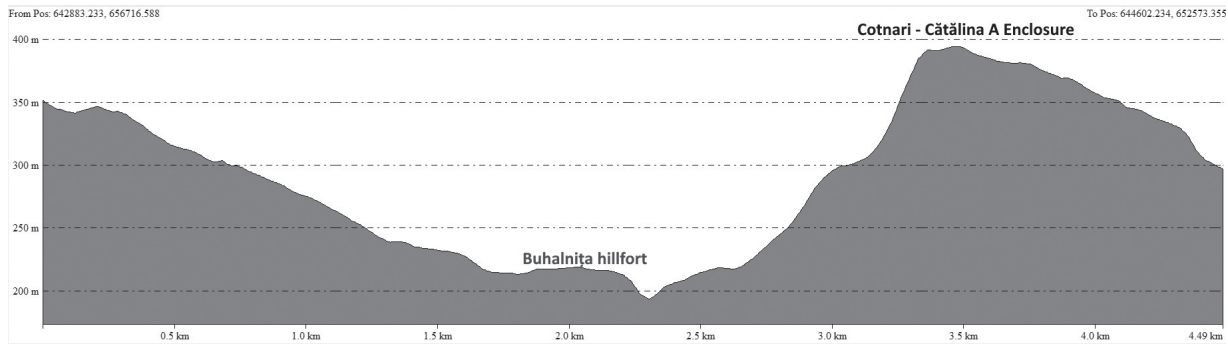


Figure 6. vertical profile showing the position of the Buhalnița-Cetate hillfort in relation with the A Enclosure of the Cotnari-Cătălina hillfort (made on a DEM with a 30 m resolution; image presents vertical exaggeration).

IV.3. Viewshed and control

A problem of great interest is represented by the area of visibility that the hillforts have. In *Chapter III* of our volume, dedicated to the archaeological repertoire, we discussed this factor for each individual objective. In this particular subchapter we set out to analyze the issue in more detail, trying to answer – as much as we can in the current stage of research – a series of specific questions related to it.

If we were to attempt to classify the hillforts according to their viewshed, quite obviously those with the largest one would be the *hilltop-forts*. For instance, the *Ibănești-Măgura Ibăneștilor* hillfort benefits from a large visibility area, that would have permitted its defenders to control much of the north-western parts of the neighboring Jijia Plain. Beyond the obvious military benefits, such a fort, built on one of the most prominent heights in the area, would also have acted as a true beacon in the landscape, signaling to friend and foe alike the presence of an authority. Such a role would be even more justified for *Măgura Ibăneștilor*, considering the fact that, as mentioned in the beginning of this chapter, it could have served as a border outpost at the northwestern limit of the East-Carpathian hillfort phenomenon.

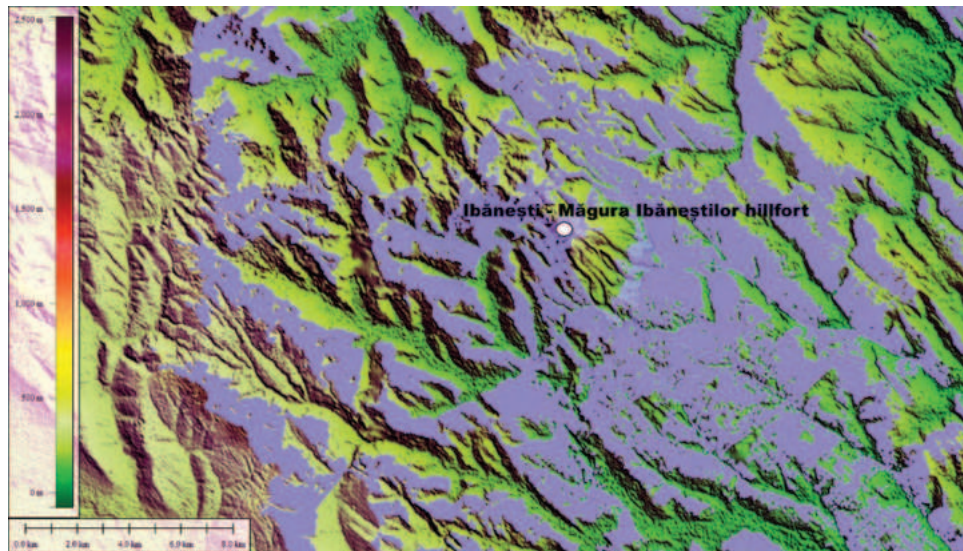


Figure 7. Ibănești-Măgura Ibăneștilor hillfort. Cumulated viewshed analysis (on a 30 m resolution DEM). With blue, visible areas.

In the case of *enclosed – plateau type* hillforts, the situation varies from case to case, depending on various factors. For example, in the case of Dumești / Rafaila – *Zarea Rafailei* hillfort from Vaslui County, the visibility to the south is somewhat limited due to the presence of higher hills. Towards north, there are limited sectors visible in the upper Bârlad valley, but much of the hills located to the

north of this river are visible. At a closer look it is noticeable however that the access routes towards the fort, both from the north and the south were within view range.

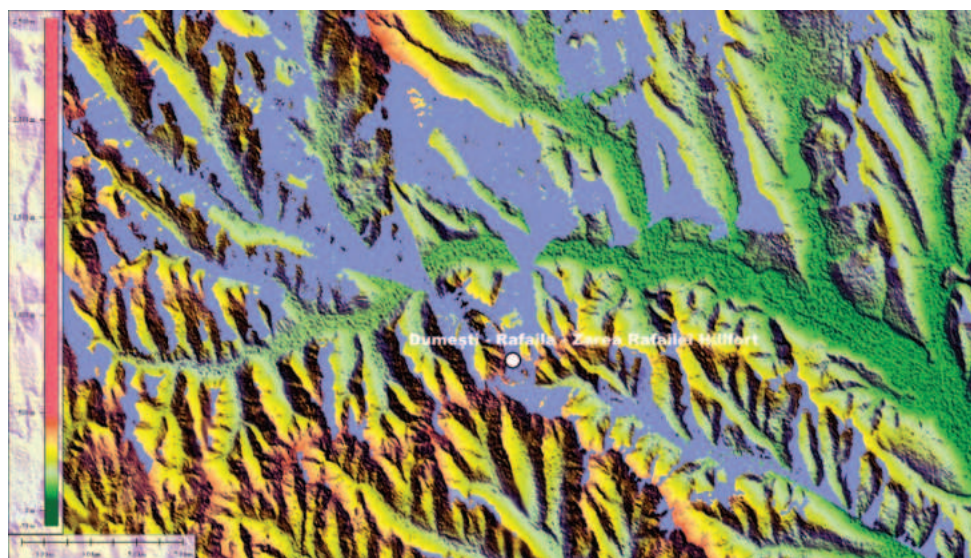


Figure 8. Dumești / Rafaila-Zarea Rafailiei hillfort. Cumulated viewshed analysis (on a 30 m resolution DEM). With blue, visible areas.

The Bunești-Dealul Bobului hillfort offered some of the most spectacular archaeological finds from our area of interest. Undoubtedly, this site functioned as a residential center, and most likely represented the seat of a local ruler – a *basileus* – judging by the large number of silver artefacts, imports, but especially the golden diadem, a mixed product of Hellenistic and local art, unique so far in the entire East Carpathian Iron Age.

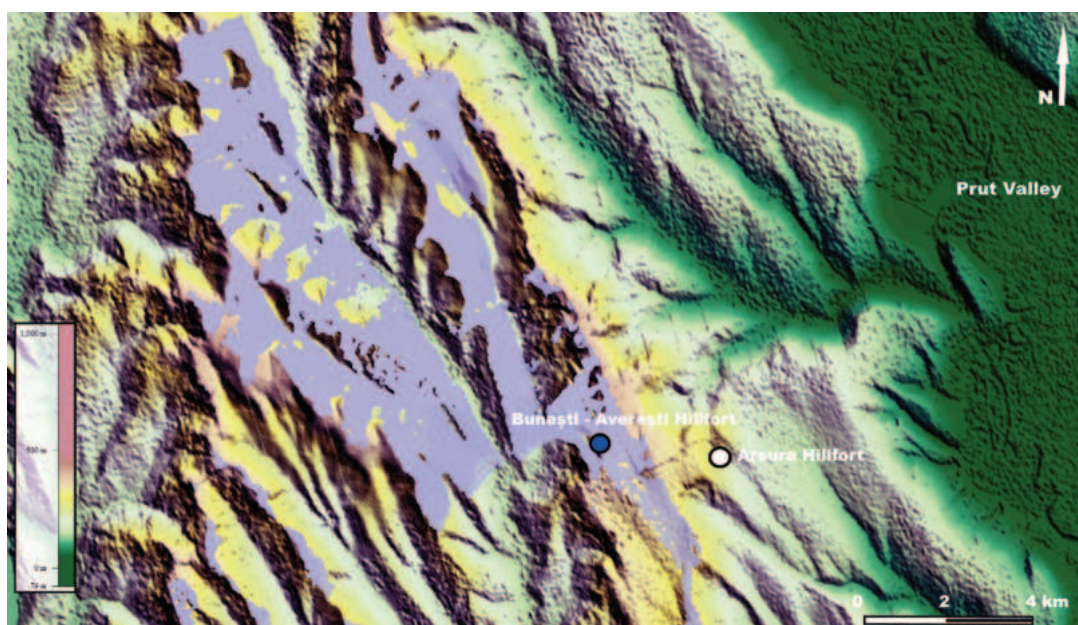


Figure 9. Bunești-Dealul Bobului hillfort. Cumulated viewshed analysis (on a 30 m resolution DEM). With blue, visible areas.

The viewshed, even if large, is more or less limited to the nearby areas, towards the northern part of the Crasna valley and its tributaries. There is no intervisibility with the neighboring hillfort from Arsura and no visibility towards the Prut Valley.

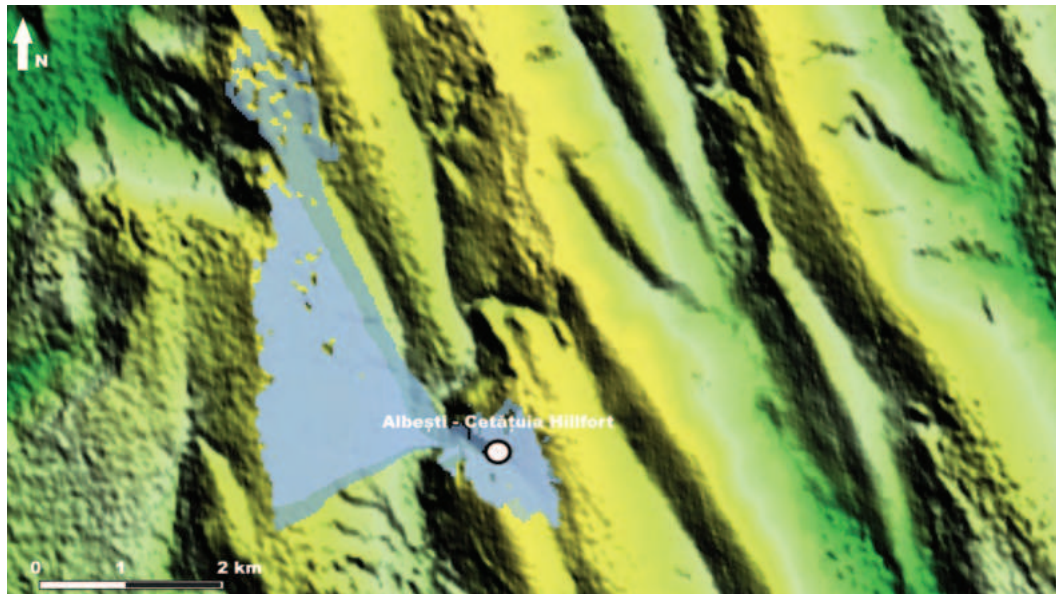


Figure 10. Albești-Cetățuia hillfort. Cumulated viewshed analysis (on a 30 m resolution DEM). With blue, visible areas.

Obviously, *hill-slope forts* have, in general, the lowest visibility area. In the case of Albești-Cetățuia hillfort, an isolated hill-slope fort, the viewshed is limited to a small strip, no greater than 2 km in a straight line, on the western bank of the Idrici river valley. This viewshed suggests that this particular fortress might have been – for whatever purpose – *meant to be hidden*. This supposition gains further weight considering that, despite the quite large ramparts and ditches, the archaeological structures and inventory found during the 2021 campaign were rather modest, suggesting a limited habitation, both in time and in amplitude.

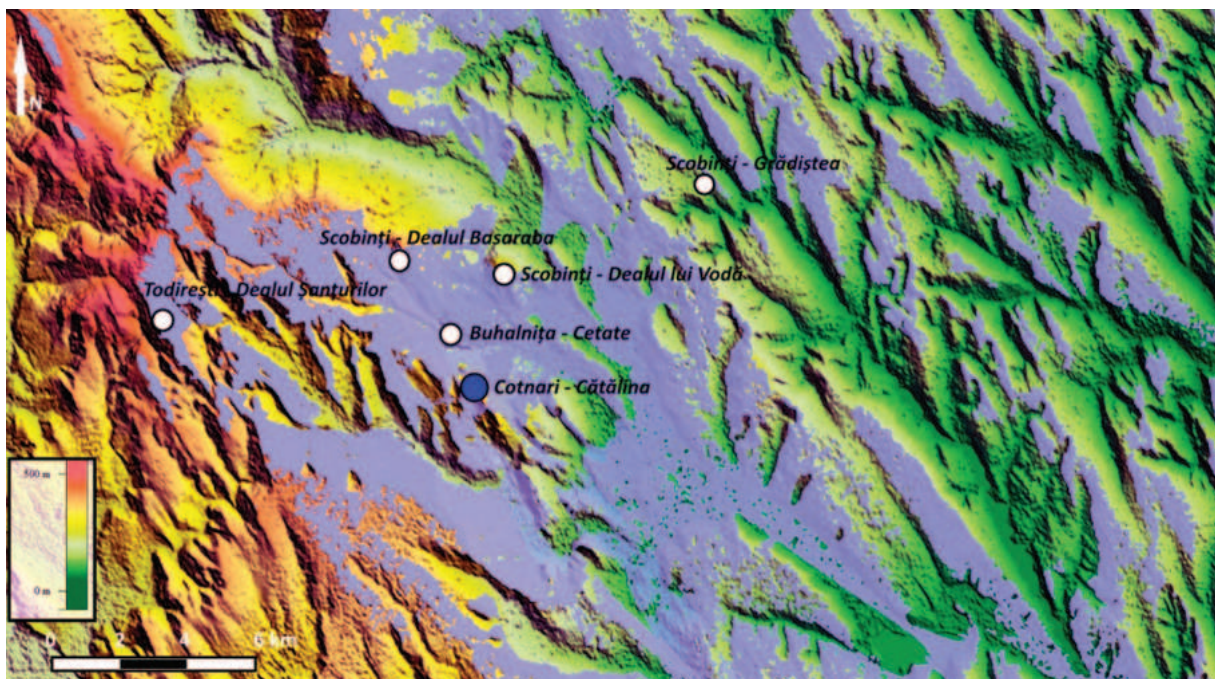


Figure 11. Cumulated viewshed analysis from Enclosure A of the Cotnari-Cătălina hillfort calculated on a 30 m resolution DEM.

Does the viewshed indicate the area of direct influence and authority of the hillfort? Does a large viewshed correlate with a greater importance? Any answer to such questions has to take into

consideration all the characteristics of these East Carpathian hillforts. Undoubtedly, as mentioned before, the Bunești hillfort was an important regional pole, an economic and probably political center, even if, compared to other forts, its visibility range might appear less impressive. Stâncești hillfort also has a rather limited viewshed, being positioned on a low plateau, but its regional and supra-regional importance is beyond any doubt. In the light of these observations, the answer to the questions raised in the beginning of this paragraph might seem mostly negative; but on the other hand one cannot deny that some hillforts did have a special position. Such a hillfort is Cotnari-Cătălina, with its special characteristic: a towering viewshed over an extended area and intervisibility with four of its neighboring sites, forming apparently a functional defensive cluster. If we take into account the presence in the area of other significant vestiges – and we have in mind here the tumular necropolis from Cucuteni-Dealul Gosan / Pietrărie³²⁶, but also the well-known treasure with the golden helmet and the associated appliques (for harness and clothing)³²⁷, the existence of a power center in the area with the focal point in the Cătălina hillfort is quite clear.

Is there any basis to speak of a general relation (of authority or of other type) between fort and the neighboring unfortified settlements? For many of the important hillforts serving as residential centers and focal points – Cotnari, Stâncești, Bunești – this statement is most likely correct. But there are also other cases that have to be taken into account. In 2020, we had the opportunity to excavate in an unfortified settlement located at about 1.5 km in straight line from the Dobrovăț-Cetățuia hillfort, in a place called *La Livadă*. There is clear intervisibility between the two. The presence of two habitation levels, as well as the rich archaeological materials we uncovered – dated roughly between the 5th and 3rd centuries BC – make us believe that the settlement had a longer existence than the hillfort itself, from which the recovered artefacts and documented situation were, in many ways, much more modest. In this case, at least, is tempting to see the “Cetățuia” of Dobrovăț as a (mostly) refuge area built by the local communities, with the economic and habitation center of gravity being in this particular case in the unenclosed lowland settlement.

The short analysis we made in the above points out to a diversity of situations and cases that strongly argue against generalizing classifications. In any case, beyond their varied functionalities and common historical destiny, the East Carpathian hillforts from the early phase of the Late Iron Age do not appear as the product of a rigid society, with established rules and structures, but rather seem the results of a plethora of local communities, adapting to various situations and particularities, finding solutions according to their own needs and possibilities.

IV.4. Tumuli in and around hillforts

An interesting problem is the presence of mounds near or inside some of the sites. In our repertoire we discussed such situations for a number of sites. In cases such as Bucecea / Cervicești-Pădurea Găvanului, Poiana Mănăstirii – *Între Șanțuri* or Murgeni-Cetățuia Ciomaga, Dumești / Rafaila – *Zarea Rafailiei* and Cetățuia Strâmba hillforts, the mounds are located at a certain distance – from a few hundred meters to a few kilometers of the enclosures. Of course, in the absence of excavations, we have no way of knowing with certainty the chronological relationship between the time when the fortresses were built and the time these monuments were constructed. They could be much older – dating back to the Early Bronze Age, but are quite unlikely to be later than the Late Iron Age, as later successive populations in the Eastern Carpathian area generally no longer built such monuments, preferring to bury their dead in pre-existing ones. This leads us to believe that some of these mounds – even if they might have already existed at the time of the construction of the hillforts – could have been “parasitized” by the builders of the fortresses in the form of secondary burials. Future archaeological research will clarify this issue.

³²⁶ Dinu 1982, p. 30–32; Dinu 1995, p. 103–126.

³²⁷ Petrescu – Dâmbovița, Dinu 1975, p. 105–124; Dinu 1976, p. 18–19.

In certain situations, however, the mounds are engulfed by fortified enclosures. In the case of the *Dochia-Cetățuia Sărățica* hillfort the mound(s) are included in the defensive enclosures. In this particular case, the lack of large-scale archaeological excavations calls for caution, as it is difficult to say to what extent we are dealing with an anthropogenic form or a natural mound that suffered human intervention. There are arguments for and against each of these opinions. In any case, its inclusion in the defensive system is by no means accidental.

The presence of two mounds located near the southern rampart surrounding Fort no. 2 of Stâncești raises a number of questions: are we dealing with old funerary mounds, engulfed by the late Iron Age fort, tombs raised during the existence of the fort, placed near the wall for apotropaic reasons, or bases for towers / other structures? Without archaeological excavations, it is impossible to answer.

In *Enclosure B* of the *Cotnari-Cătălina* hillfort, in the southern extremity, there are two mounds with relatively close dimensions. Their presence inside the enclosure, at a distance from the defensive system, excludes a defensive role. Were they the graves of the founders of the hillfort or of some heroic ancestors, an important place of memory for the population that lived here 2500 years ago? Only archeological excavations could give us some answers. Of special interest is also the situation in the *Moșna* hillfort. In the enclosure there is a massive tumulus, raising again questions about the functionality of this hillfort. In any case, the phenomenon of tumuli / mounds inside hillforts is also present in other Late Iron Age cultures, with various explanations and interpretations being offered³²⁸.

³²⁸ I.e. Fernandez-Götz 2014, p. 121–122.

■ CHAPTER V. UNDERSTANDING THE HILLFORTS. MORPHOLOGY AND DEFENSIVE SYSTEMS

V.1. General typological aspects

V.1.1. Shape of hillforts

Generally, most of the hillforts present an irregular plan, adapted to the natural configuration of the terrain. There are few forts that could be considered “*liberated from topographical constraints*”³²⁹: Cotnari-Cătălina hillfort with its large second enclosure, and Victoria – Șanțul Caterinei and Scobinți-Grădiștea with their atypical positioning. Any attempt of classifying into further categories would not be productive and would result in categories composed of only one or two items, of arguable statistical relevance; however, there are a few examples of objectives that do seem to have a relative geometric shape.

A distinct category is formed by those that are more or less round in shape. The category is represented by a few particular examples: Stânișești / Răchitoasa-Cetățuia; Fedești-Cetățuia; Cetățuia-Cetățuia Strâmba. It is interesting to note that the size of each of these particular sites is rather small (no larger than 2 ha) and that they seem to be clustered especially in the southern part of the Moldavian Plateau. In other regions of Iron Age Europe, circular hillforts have often proved to be *fortified farmsteads*³³⁰, but for the moment there are no arguments to suppose such a role for East-Carpathian hillforts of this particular shape. Probably, further archaeological excavations will give more answers.

The semicircular shaped hillfort, defended naturally on one side and surrounded by a rampart and ditch arranged in an ellipsoidal shape, can be considered another subtype, with several examples (Văculești-Dealul Podiș; Buhalnița-Cetate).

Rectangular shaped hillforts are rare³³¹. A confirmed example is the Dochia-Cetățuia Sărățica hillfort. Rectangular shaped – with more or less rounded corners are the sites from Bunești and Crivești.

Regarding the number of enclosures, most of forts seem to be defended with a single enclosure, but there are also cases of sites with two enclosures (for ex. Stâncești, Cotnari, Poiana Mănăstirii), or even three enclosures (Todirești). As there were not made any archaeological excavations inside or around these sites, it is difficult to say to what extent the multiple enclosures functioned simultaneously, or if they represent the ruins of distinct phases in the evolution of a unicellular fortification. At least at Stâncești– as shown by archaeological excavations and resulting chronology, we can say

³²⁹ Ficthl 2005, p. 58.

³³⁰ Brown 2009, p. 4–7.

³³¹ Over time, due to their curious shape, some archaeologists less familiar with the bibliography of the topic have considered that these objectives do not belong to the Iron Age but to other, later periods. In fact, rectangular fortifications are known in the Late Iron Age, not only in Western and Central Europe but also in the Prut-Dniester area (see for example the fortress of Hansca). In any case, attribution of a fort to a certain period should be based not solely on the shape (which can often be a misleading criteria) but on archaeological and historical arguments.

that only in a single phase did Fort 1 and Fort 2 functioned in parallel. Regarding Cotnari–*Cătălina* hillfort, we may assume that for a time both enclosures functioned simultaneously.

V.1.2. Size of hillforts

In the older literature, the surface size of hillforts was often estimated or calculated on the ground with rudimentary means. Researchers familiar with the description of the sites, consulting the values given by us will notice some differences, more or less significant, from case to case. In our repertoire we calculated the surfaces using GIS programs in order to estimate with the highest possible accuracy. However, a certain limit of error must be taken into account. Generally, we sought to measure only the inner surface, without taking into account the surface of the defensive system itself; in cases where certain sites were affected by landslides, we mentioned the preserved areas, and not the larger, originally estimated ones. We had not inserted into our table the hillfort from Căndești, because we consider the data for it to be quite problematic. Ibănești-*Măgura Ibăneștilor* and Scobinți-*Dealul lui Vodă* hillforts, with surfaces largely destroyed by modern interventions or landslides – were inserted with null values.

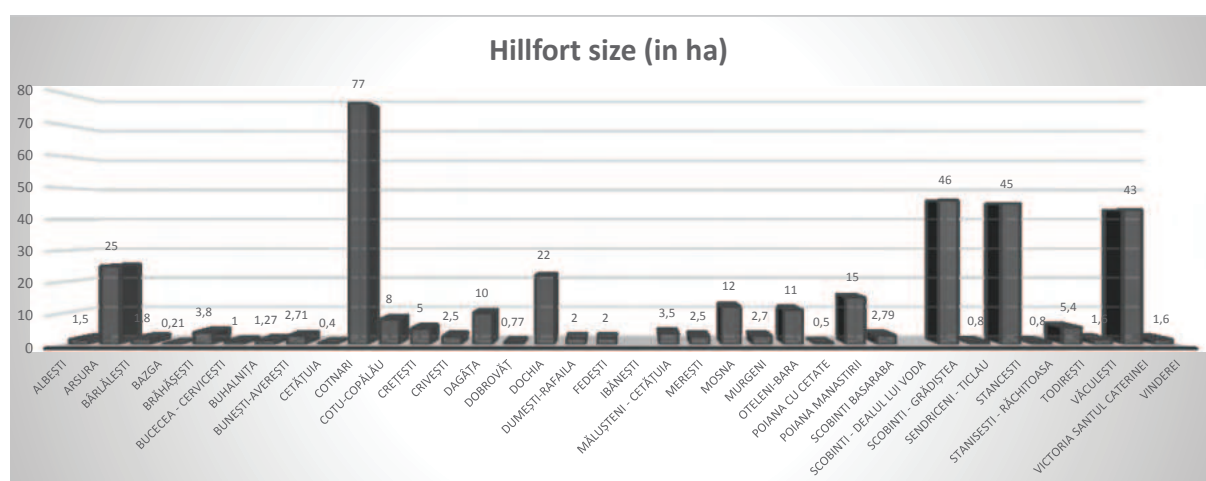


Table 1. Size of the hillforts (in ha). Note: those whose size could not be established or estimated accurately were not inserted.

Regarding the dimensions of the sites, we noticed a fairly large variety, the enclosed surfaces varying between approx. 77 ha (Cotnari–*Cătălina*), respectively 0.21 ha (Bazga). We could try to separate them in groups according to size – eight forts with an area of less than one hectare; 14 enclosures with an area between one and five hectares; 5 enclosures with an area between five and ten hectares; 4 enclosures with an area of 10 to 25 hectares and finally 4 fortifications larger than 25 hectares. The statistic, as simple as it is, furthers the idea that the hillforts had different functionalities, expressing also different economic, military and social potentialities.

For the Lower Danube area, during 5th–3rd century BC, the hillfort size is usually between 1.5–25 ha, most of the sites covering around 2.5 ha³³². The ones located between the Prut and Dniester present similar dimensions³³³. In the light of these comparisons, some of the sites from our area of researches such as the hillfort from Cotnari–*Cătălina* might seem large. In fact, it would be, to our knowledge, the largest such site from the early Late Iron Age Carpatho-Danubian area.

However, even such large enclosures like the one from Cotnari appear quite modest in comparison with those located in the forest-steppe of Ukraine, which often cover areas of hundreds of

³³² Sirbu, Trohani 1997, p. 514.

³³³ Zanolci 1998, p. 216–221, Tab. 2.

hectares or even more, like the case “Scythian” fort from Bielsk, with a size of 4700 hectares³³⁴. In Central Europe, there are sites such as the Heidengraben oppidum (Germany), which covers an area of 1700 hectares, the oppidum of Zavist (Czechia) with a surface of 117 ha³³⁵ and many others. So even if at the level of the Carpatho-Danube area, for the beginning of the Late Iron Age, hillforts like Cotnari or Stâncești may seem large, even “exaggerated” in size, compared to other similar monuments in Temperate Europe, their surfaces no longer appear unusual.

V.1.3. Bastions

Taking a look at the fortifications plans from the Dniester banks, a visible complexity of defensive systems appears quite obviously. Especially in the case of the hillforts from the Saharna micro-zone, we can see complex “bastions” added to the main line of defense, giving to the plan of the hillfort an almost “Early Modern” look, often puzzling to historians and archaeologists less familiar with the peculiarities of Iron Age military architecture. It is beyond any doubt – as proven by numerous archaeological excavations made by our colleagues from the Republic of Moldova, that these constructions are ancient, contemporary with other elements in the defensive system, serving to increase the defensive effectiveness of the hillfort³³⁶.

To the west of the Prut River, in our area of interest, we did not identify, so far, such complex situations. It is true that some hillforts – for example Dumești / Rafaila – *Zarea Rafailiei*, the one from Crețești or the one from Murgeni – *Ciomaga* apparently have “bastions”, but the analogy is only relative; in these cases, what seems to be a “bastion” results from the disposal of the main (and single) defensive line. Only at Oțeleni / Bâra we noticed a smaller, somewhat rectangular enclosure attached to a much-larger hillfort, similar in concept (but not in shape) to the situations documented on the Dniester.

A special situation is Dochia hillfort, where the defensive system includes a massive mound of large dimensions (it is not at all clear whether it is anthropic or natural). It could have served as the base of a tower, or even a small “castle”-like fortification.

V.1.4. Entrances and gates

Regarding the entrances, we can distinguish two categories. Simple entrances appear often in the form of interruptions in the defense rampart³³⁷. Many of the objectives we have discussed have one or several such interruptions which are quite obvious. They are not always arranged uniformly in the general hillforts plan. Moreover, not all such interruptions represent in fact ancient entrances: some of them are likely the result of modern interventions: forest roads, exploitation roads, etc. In any case, the lack of archeological excavations carried out in the area of the entrances makes it impossible for now to discuss the issue of the gates system³³⁸.

The second type, the inverted “V” shaped system visible in the case of two forts that in general have numerous similarities: Victoria – *Șanțul Caterinei* and Scobinți-*Grădiștea*. The military value of such an entrance is obvious: any assailant that would want to storm the gate would be forced to approach it while being subjected to potential missile barrage from both its left and right side. On the other hand, we might think to other explanations, beyond the realm of warfare and military: the similarities between this type of entrance and the one specific to traditional farmsteads (especially sheepfolds, the so-called “*strunga*”) are visible.

³³⁴ Daragan 2020, p. 32.

³³⁵ Venclova *et alii* 2013, p. 43.

³³⁶ Zancoci, Băț 2017, p. 11–17; Haheu 2020, p. 126–127.

³³⁷ As pointed out by A. Florescu (see Florescu 2022, p. 66).

³³⁸ In other areas of Europe where hillfort entrances were excavated, valuable information was gathered about the gate system and its functioning (for example Pope *et alii* 2020).

Consisting of only two types, the entrances of the hillforts from our area of interest are rather simple. In comparison, to the east of Prut, on Middle Dniester one finds much more complex entrance systems, indicating different military conceptions and needs³³⁹.

Discussing the issue of entrances, A. Florescu noticed the existence of man-made access ramps, spread over long lengths, well over a kilometer, through which access would be made to the sites located on prominent hills and plateaus³⁴⁰. The hypothesis is plausible, and as the author appreciates, the builders of the fortresses certainly had the necessary resources, to build such large-scale works. Yet at the moment, in the absence of excavations and surveys to certify anthropogenic intervention on such a scale, it is better to keep some cautious. At Scobinți-Dealul lui Vodă hillfort, the “ramp” mentioned by Florescu is certainly natural.

V.2. Defensive systems

V.2.1. Ramparts. General considerations

Before discussing the issue of the fortifications defense system, we consider that some terminological and theoretical clarifications are needed³⁴¹. However, beyond establishing the terminology and basic principles, we will not enter into detailed discussions, as in the following subchapters we will develop these topics further as we analyze the situations from our area of interest.

What is a rampart? In the MacMillan Dictionary of Archaeology, the term “rampart” was defined as “*an elongated bank, often forming an enclosure. Combination of ramparts and ditches make up the defenses of hillforts in prehistoric Europe*”³⁴². In the Oxford Concise Dictionary of Archaeology, the term is defined as “*elongated bank or wall forming the defensive boundary of an enclosure. Most ramparts are associated with external ditches*”³⁴³.

Regarding its shape, A. C. Florescu had stated that the rampart “*appears to us nowadays in a parabolic shape. Its arched profile is the result of a long flattening process*”³⁴⁴. Similar conclusions are also found in the MacMillan Dictionary of Archaeology, “*experimental archaeology has shown that ramparts erode from their sides. The profile of the rampart as seen today may therefore bear little relation to its original form*”³⁴⁵. How much do the ramparts erode and to what extent their actual profile and shape differ from the original represents a delicate and very important question, on which we shall insist later.

Regarding the typology of ramparts themselves, numerous opinions were expressed over time. In our area of interest, we might distinguish two categories of ramparts: *dump ramparts* and *timber boxed ramparts*. The *dump rampart* can be defined as a simple embankment built of earth (with varying degrees of stone or other materials), generally lacking any complex internal structure, although in some cases it may have a stabilizing *core*, built of different kind of soils than the rest of the filling. The slopes may be supported by *revetments*, made either of wood or stone.

The resulting depression from which the building materials are taken forms the *ditch* (or moat), that is usually placed adjacent, in front of the rampart³⁴⁶. Between the beginnings of the ditch's inner

³³⁹ Zanoci, Băț 2017, p. 18; Zanoci, Băț 2020, p. 111–129.

³⁴⁰ Florescu 2022, p. 67.

³⁴¹ In Romanian historiography of the Late Iron Age, the theoretical problems raised by the hillforts defensive system and the issue of ramparts associated with ditches were rarely discussed in detail; works such as Moscalu 1979, p. 339–351; Babeș 1997, p. 199–236; Zirra 2012, p. 190–200 and others are dealing with special situations such as vitrified ramparts, burned or unburned brick fortifications, various types of stone walls, etc. One notable exception is in the work of Adrian C. Florescu, who in his manuscript about the Iron Age forts from Moldova, dedicated extended space to the issue of ramparts and ditches and their architecture, attempting also several reconstructions (see Florescu 2022, *passim*).

³⁴² Whitehouse 1983 p. 423.

³⁴³ Darwill 2008.

³⁴⁴ Florescu 2022, p. 73.

³⁴⁵ Whitehouse 1983 p. 423.

³⁴⁶ See also Darwill 2008; McIntosh 2006, p. 302.

slope and the beginning of the rampart's outer slope there might be a space, of varying size, called *berm*. It could have served to various purposes: to prevent the soil from slipping off the slopes of the rampart directly into the ditch, to accommodate various types of semi-permanent obstacles, etc. When the rampart and the ditch present an unbroken slope from the crest to the bottom of the ditch (thus, without a berm) we might talk about a *glacis rampart*³⁴⁷.

The vertical obstacle – in the case of the dump rampart system – is the *palisade*, that is the wooden wall / structure emplaced on the crest of the rampart.

The efficiency of the defensive system is given by the combination of these three factors: the ditch – the rampart – the palisade. The goal of the first two is to give the defenders the highest possible advantage and to make it as difficult as possible for the attackers to gain access to the palisade. The palisade, that is the main line of defense where the defenders are located. Unfortunately, due to erosion affecting (especially) the crest but also due to the fragility of the wood and earth architecture itself, in general, in European Iron Age hillforts, the palisade is more often supposed than archaeologically determined³⁴⁸.

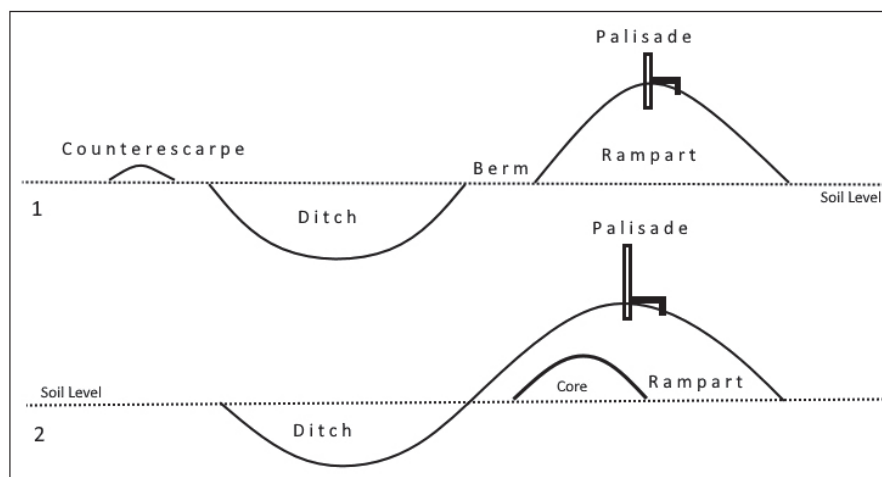


Figure 1. Schematic and idealized representation of various types of dump ramparts and possible constituting elements. **1.** Rampart with berm; **2.** Glacis rampart.

Since the dump ramparts, even in cases when they are supplemented through different external revetments or internal reinforcements, do not present a vertical slope, in order to attain a certain height, a large amount of construction material is needed for their elevation. Despite flattening and erosion that moves in time the material from the crest to the base, most of it continues to be present on site if there are no further anthropic intrusions. In ideal conditions, flattening would lead to a decrease in height, attenuation of slopes and increase in apparent “base” width.

Concerning the ditch, the filling and clogging over time generates an attenuation of the slopes and a decrease in depth, leading to the transformation of the once formidable obstacle into a modest depression, often barely visible on the surface. On the other hand, in the situation where the ditch is located on a slope, even if it is a slight one, the drainage phenomena often lead to its transformation into a ravine, with a deepening and enlargement much beyond its initial size.

³⁴⁷ Darwill 2008.

³⁴⁸ Fichtl 2010, p. 359. Some might question the existence of the palisade, but regardless of its shape and complexity – ranging from what could have been a simple twig fence stretched between wooden poles to a massive structure of solid wood – its presence on the crest of the rampart is a *must*. In the absence of the palisade, the defenders become exposed to the projectiles fired by the attackers; once the defenders are taken out from their position, climbing the rampart and the ditch becomes just a matter of time. Looking to other areas and timeframes of the Ancient World, for ex. in the Bronze Age Levant, the crest of ramparts was always surmounted by defensive walls or some sort of other vertical defense (Burke 2004, p. 93–94). For our area of interest, we have documented top palisade at Dobrovăț-Cetățuia hillfort, and possibly post-holes from the palisade at Poiana Mănăstirii (see further in this chapter).

Timber box ramparts are defined by Oxford Concise Dictionary of Archaeology as “style of rampart construction common amongst the late Bronze Age and early Iron Age hillforts of central and northern Europe. Two parallel lines of well-spaced paired upright timbers were joined together top and bottom, and linked longitudinally to create a wooden framework or series of boxes. These were then filled with rubble and soil to give strength and mass”³⁴⁹. In Romanian archaeological literature these structures are named either “walls of earth and timber”³⁵⁰ or “complex palisade”³⁵¹. Timber box ramparts are using the principle of “rammed” or “reinforced earth”³⁵². They offer a vertical face to the enemy, being a “*murus sui generis*”, but the specific construction system imposes a number of limitations. The height and width of such a “wall” are in direct proportion to the dimensions and endurance of the wooden structure; the more massive the wall (and the greater the amount of filled earth / stone) the greater the pressure on the “skeleton” structure. There is the expansion and compression of the reinforced soil, which occurs as a result of natural phenomena such as frost, thawing, drought or humidity as well as the degradation of the wood structure over time. To avoid or to delay as much as possible these issues, a careful selection of soils used as filler is necessary. In any case, the aspects mentioned concerning the building technique, limit the dimensions to which such a “wall” could be built, and implicitly – the amount of soil it can contain, as well as the size of the “parabolic dump” it ultimately generates as a result of its ruining, erosion and flattening.

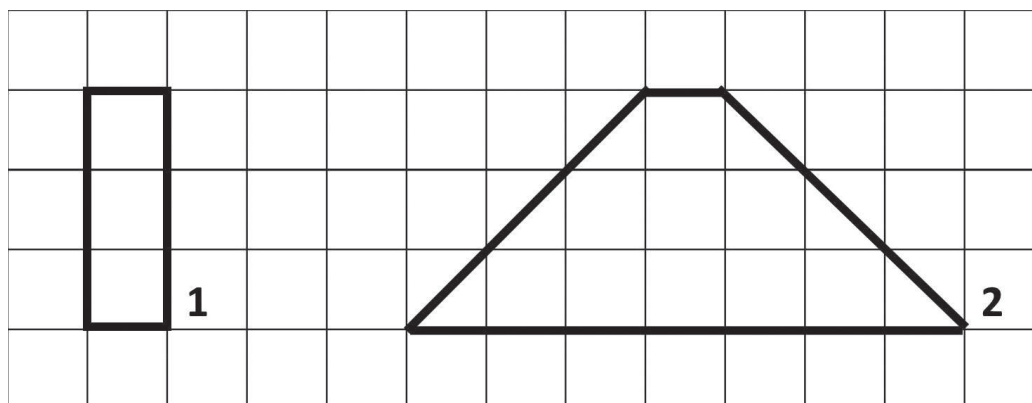


Figure 2. Comparison between an idealized timber box rampart (1) and a dump rampart (2). At a base of 1 m width, only 3 cubic meters of earth / linear meter are necessary in a timber-box system to attain a desired height of 3 m; for a dump-rampart, with an ideal slope of 45°, 12 cubic meters of earth / linear meter are necessary to attain the same height.

To these general types can be added variants and sub-variants attested in the European space during the Iron Age, on which we will not insist, since in our area were not determined so far. As pointed out in the literature, ramparts were invented, used, sometimes even “reinvented”, independently, in different parts of the world by various historical and prehistoric populations. Similar problems have led to similar solutions based on empirically acquired knowledge of engineering and architecture in the context in which the laws of physics are universal³⁵³. Dump rampart were widely used across all continents; timber-box ramparts (of varying types and subtypes) appeared in Europe since Neolithic and were used during the Bronze and Iron Ages as well as in Roman

³⁴⁹ Darwill 2008.

³⁵⁰ Sirbu, Trohani 1997, p. 515–516.

³⁵¹ Zancoci 1998, p. 59.

³⁵² The so-called “reinforced earth”, with all associated potentialities and limitations, was discussed by French architect and engineer Henry Vidal starting from the late 1950s. A reading of his works as along with other papers concerning this problem could offer precious insights for archaeologists. See Vidal 1969, p. 1–16; Abdelouhab 2010; Becket 2011; Payeur 2015.

³⁵³ For these reasons, we considered appropriate to make in the following subchapter references and comparisons, when necessary, to situations in other, more or less distant geographical and cultural areas that had been better researched.

military architecture³⁵⁴ and later on, even in the Middle Ages. The existence of convergences does not exclude, however, certain regional and historical trends or patterns.

V.2.2. Dump rampart, ditch and palisade

In the following we will analyze what seem to be the documented *dump rampart* systems from our area of interest. For this analysis we collected data from six distinct sites and a total of 13 archaeological trenches³⁵⁵. We took into account several verifiable variables based on drawings and plans: rampart outer slope declivity; rampart inner slope declivity; ditch outer slope declivity; ditch inner slope declivity; total height of rampart (preserved)³⁵⁶; total depth of ditch; total height of obstacle (current) as well as the type.

For some objectives we did not have access to all data; for example, at Poiana Mănăstirii, hillfort, the section we made in 2017 – in fact a straightening of a fallen bank – did not affect the adjacent ditch. At Ibănești, the rampart was largely destroyed; at Stâncești, in trenches t5 and t2 the rampart is built at the edge of the plateau, lacking a ditch. Regarding the actual calculation of the slope for the ditch we did not calculate the current slope, being irrelevant, since it is a product of erosion and clogging. We calculated instead that the one resulting from the archaeological section; for the rampart, we calculated the slope of the first layer below the vegetal one. The slopes that these defensive elements present are not uniform, varying between different values. Into the table we are mentioning the minimum and maximum³⁵⁷. Heights and depths – when available – were taken from the literature³⁵⁸.

Table 2. Data about dump ramparts and ditches from our area of interest.

Hillfort and section	Illustration	Rampart outer slope declivity	Rampart inner slope declivity	Rampart inner core	Ditch outer slope declivity	Ditch inner slope declivity	Total height of rampart (preserved)	Total depth of ditch	Total height of obstacle (current)	Type
Cotu-Copălău (S V)	Pl. 4/1	20°–40°	15°–22°	-	55°–60°	40°–45°	2 m	2 m	4 m	Glacis
Cotu-Copălău (S II)	Pl. 4/2	30°	15°	-	25°–30°	40°–50°	1,50 m	3,50 m	5 m	Glacis
Cotu-Copălău (S III)	Pl. 4/3	10°	5°–8°	-	50°–40°	40°–60°	1 m	3,50 m	4,50 m	?
Dobrovăț	Pl. 5/1–2; Pl. 7.	25°	5°	-	30°–45°	25°–35°	0,60 m	2 m	2,60 m	Glacis
Ibănești	Pl. 4/4.	-	-	-	50°–70°	40°–55°	-	1,60 m	-	?
Moșna	Pl. 3/4.	20°–55°	10°–20°	-	30°–55°	30°–55°	3,20 m	3,80 m	5 m	Glacis

³⁵⁴ Beckett 2011, p. 6.

³⁵⁵ The data from Merești hillfort is not conclusive and we decided not to insert it. For Bunești we did not have access to published documentation. A dump rampart superimposing a *Pfostenschlitzmauer* was documented at Cotnari-Cătălina hillfort; since the situation from this particular site raises specific problems, we will discuss it in a separate subchapter (see further in our volume).

³⁵⁶ Since many of the archaeological plans from older literature do not present scale (especially at Stâncești), we took the data regarding the preserved height of the rampart and the depth of the ditch from Florescu 2022.

³⁵⁷ A. C. Florescu in his manuscript mentions the declivity of the ramparts outer slope for a number of objectives – both from the Carpatho-Danubian area as well as from other regions, but settles on single values (Florescu 2022, p. 74). His measuring criteria are not clear for us.

³⁵⁸ Florescu 2022; Florescu, Florescu 2005; Șovan, Ignat 2005 and others.

Hillfort and section	Illustration	Rampart outer slope declivity	Rampart inner slope declivity	Rampart inner core	Ditch outer slope declivity	Ditch inner slope declivity	Total height of rampart (preserved)	Total depth of ditch	Total height of obstacle (current)	Type
Poiana Mănăstirii	Pl. 3/3.	20°–30°	10°–20°	-	-	-	2,50 m	-	-	With berm
Stâncești (Fort 1, L 1)	Pl. 2/1.	32°–35°	30°	Yes	45°–70°	40°–55°	4,60 m	6 m	10,60 m	Glacis
Stâncești (Fort 1, L)	Pl. 2/2.	30°–45°	20°–25°	Yes	32°–70°	30°–70°	5 m	7,20 m	12,20 m	With berm
Stâncești (Fort 2, L1)	Pl. 2/3.	35°–40°	20°–25°	Yes	45°–60°	55°–70°	2,75 m	3,60 m	6,35 m	Glacis
Stâncești (Fort 2, t1)	Pl. 2/4.	25°	20°	Yes	30°–60°	40°–50°	3,10 m	4,20 m	7,30 m	With berm
Stâncești (Fort 2, t5)	Pl. 3/1.	20°–40°	20°	Yes	-	-	2,60 m	-	-	Glacis
Stâncești (Fort 2, t2)	Pl. 3/2.	30°–35°	20°	Yes	-	-	2,40 m	-	-	Glacis

The data summarized in the table shows us a series of situations and differences, even within the same hillfort (for ex. Stâncești). Regarding the inclination of the rampart outer slope, we can notice that it includes values between 10° and 55° degrees. Considering that the value of 10° documented in trench S III from the Cotu – Copălău hillfort represents an exception, due to a particularly visible flattening of the defensive system, we can say that most of the values varies between approx. 20°–25° and 55° degrees, averaging around 35°.

Regarding the degree inclination of the inner slopes, the values are significantly lower, ranging between 5° and 30°. The values of 5° documented in Cotu – Copălău and Dobrovăț are due to strong flattening that affected the defensive systems; eliminating them from the equation, we remain with values between 10°–30° degrees, a range obviously lower compared to that of external slopes. This difference in inclination between the outer slope – opposed towards the potential attack – and the inner one is not something unexpected; the first had to hinder the advance of the attackers, while the second, on the contrary, had to facilitate the access of the defenders towards the main defensive element – the palisade.

Analyzing the declivity of the outer and inner slopes of ramparts belonging to several excavated fortifications, both from the Early and the Late Iron Age from Romanian territory and beyond, A. C. Florescu corroborates them with the geotechnical analyzes performed on the soil samples taken from within the ramparts of the Cotnari-*Cătălina* hillfort. He concluded that the ramparts have (current) inclinations close to the angle of natural slope³⁵⁹. Bringing into comparison other ramparts with stone in their structure (in various quantities) presenting similar declivities, A. C. Florescu developed his arguments, considering that timber must have been absolutely necessary in order for the dump rampart to maintain steeper only on outer slopes³⁶⁰.

³⁵⁹ Florescu 2022, p. 73–75.

³⁶⁰ Florescu 2022, p. 76. Unfortunately, since the illustration of the manuscript we edited was preserved fragmentarily, the theoretical foundations behind the reconstructions and ideas proposed by the author present, unfortunately, numerous blank spots. It is, however, quite obvious that he envisioned the ramparts as having original declivities significantly greater than the actual ones. Judging by the little illustration preserved, at least for the site from Stâncești, Florescu reconstructed graphically outer slopes of 50° and 60° (see Florescu 2022, Pl. 14/2–3).

At a closer look the assessment of Florescu is debatable. Judging by the magnitude of some ramparts, the wooden structures or external revetments needed to support them would have had to be very steady. In some cases, there were more than 10–15 cubic meters of earth per linear meter of rampart. Florescu noticed that alkaline soils in the East Carpathian region led to the decomposition of lignin³⁶¹, but even so, the excavations should have at least highlighted the imprint or the pits that supported such a structure³⁶², which should have left a larger quantity than “sporadic traces” of wood. It is difficult for us to admit that all the excavations carried out by previous archaeologists, including those made by A. C. Florescu, were flawed and could not notice the traces of wooden structures³⁶³.

It is possible that another solution of reinforcing the rampart was used, using timber that without complex ground-supported structures (and implicitly, post-hole traces). This solution implies inserting into the rampart wooden beams arranged horizontally, at various positions and depths. In 1957, Henri Vidal presented a simple experiment, but with most important reverberations in architecture and geotechnics: he found out that “dosing” a trapezoidal sand prism with horizontal needles, the prism successfully resisted to horizontal and vertical pressure, maintaining its original form³⁶⁴. Our reference to the results of a modern experiment may seem inappropriate, but as we pointed out in the previous subchapter, the principles of “reinforced earth” could have been known empirically and used since ancient times. Could such a system be used in the construction of ramparts, in our area of interest? While its effectiveness cannot be questioned, we must not forget that wood rots in time³⁶⁵. If in the case of a timber box rampart or a rampart system with external revetments, the replacement of degraded elements is easy, since they are located on the surface, in the case of a rampart with inner wooden structure any intervention would involve extensive digging, which is not practical. In addition, gaps caused by wood decay are likely to cause serious structural problems resulting in slippage and material collapse, weakening any constructions on the crown (towers, palisade). For these reasons we maintain a dose of skepticism about the existence of massive wooden interior structures meant to support the dump rampart. The “faint traces of wood” mentioned by A. C. Florescu in his reports may as well have other explanations.

In our opinion, creating and maintaining a rampart with an outer declivity higher (to a certain degree) than the natural angle of inclination can be made using much *more rudimentary* and efficient means both in terms of cost as well as in maintenance effort. One of the handiest solutions was to allow the growth of vegetation (grass) on the surface of the rampart. This could be made even easier if the outer surface of the rampart was covered with a coating of furrows. The grass would further protect against damage from rain and erosion³⁶⁶.

³⁶¹ Florescu 2022, p. 74.

³⁶² For example, in the structure of the rampart at Bielsk hillfort (Ukraine), traces of post-holes and other elements supporting the existence of an inner wooden structure and a wooden revetment are clearly visible (see for ex. Daragan 2020a, Fig. 12), same at Trakhtemyriv hillfort (Ukraine) (Дарган 2017a, Рис. 40/2–4; Рис. 41), Severynivka (Shelekhan *et alii* 2016, Fig. 2), etc.

³⁶³ At Cotu – Copălău hillfort under the rampart, in S II and S V were found traces of postholes; they however are not continuous in the middle and upper part of the rampart, so we agree with the authors who interpreted their presence as indicating an earlier, distinct phase of fortification, possibly timber-box type (Șovan, Ignat 2005, p. 30).

³⁶⁴ <https://expo.geotechnique.org/fr/techniques-terre.php> (accessed on 06.02.2022).

³⁶⁵ To prevent rot, the wood could have been burned or “smoked”; but in this case the traces found in the structure of the ramparts should have been much more consistent than those mentioned in the literature.

³⁶⁶ Since 2019 we are involved as consultant in a project to build an archeological park, “Getodava”, that aims, among others things, to create an accurate replica of a Late Iron Age hillfort. At that time, we faced the same dilemmas regarding the construction of the rampart and especially the stabilization of the slope; the simplest solution, of weeding it, was offered to us by architect dr. Iulian Diaconescu, also part of the team. A question arises: would have ancient people resorted to this technique? To our knowledge, Romanian archaeology gave so far little attention to this issue; for the Gallic ramparts some authors suppose they were covered with grass, for ex. Sophie Krausz “*Il est probable que la pente externe e tait recouverte de v g tation, entretenue ou non*”. (Krausz 2014, p. 201). Discussing the architecture and structure of ramparts from the Middle East Bronze Age, A. Burke is of a different opinion. He noted that “*Although some vegetation*

How steep could have been initially the outer slopes of the ramparts? In order to bring the problem to its essence, would a rampart with an outer slope of around 35° be effective from a military point of view? Some answers might come from a rather distant analogy. For the Bronze Age Levant and the Middle East, the ramparts (with or without stone resistance structures / revetments) of the excavated forts and cities have current external inclinations of approx. 30° , a few over 40° , being estimated that they could have had declivities greater than 35° at the time of construction, but not by much³⁶⁷. The values are surprisingly similar to those attested in other areas, including our area of interest. We also have to keep in mind that were discussing a geographical space where, due to specific climatic conditions, the use of timber is automatically excluded, while at the same time, military technique and strategies – especially siege tactics and engines – were significantly more developed than in the “Barbarian” Europe of the Iron Age. If in Levant a rampart with an outer slope of 35° – 40° could have been militarily effective, we cannot see why in our area of interest it could not have been. Of course, as W. Harding puts it when discussing Iron Age forts from the British Isles, a 35° – 40° slope could be climbed with difficulty³⁶⁸, but we always have to keep in mind that the efficiency of the defensive system does not rely solely on the rampart itself (and its external slope), but on the combination of *ditch – rampart – palisade*.

In regard to the total preserved height of the ramparts, values vary between 0,60 m at Dobrovăț-Cetățuia hillfort and 5 meters in the case of Fort 1 from Stănțești. The situation in Dobrovăț can be explained by the small size of the defensive system, understandable given the modest nature of the discoveries inside this small enclosure. In fact, we are not even dealing with a proper rampart, but rather with a “pedestal” made of soil excavated from the ditch, on which the palisade was built. Of course, a certain role in this equation was also played by repeated flattening, due to agriculture, viticulture and later the acacia plantation that seriously affected the site. The same effect of flattening – produced as a result of forestry works³⁶⁹, can be observed in Cotu – Copălău, where the rampart does not exceed today a height of more than 2 m. Regarding the situation observed at Poiana Mănăstirii site, the height (2 m)³⁷⁰ and the width at the base of the rampart of approx. 20 meters raises some question marks, and would seem to suggest overlapping of two distinct phases of construction.

The analysis of the stratigraphy of the dump ramparts allowed some observations regarding their internal structure. Far from being simply made through “dumping”, as the name might imply at first glance, the stratigraphy of the ramparts suggests usage of different categories of excavated soils, based on an empirical knowledge in pedology. For example, in the front part of the dump rampart of Poiana Mănăstirii site (meters 3–10) we noticed an overlapping of numerous alternating thin soil layers; similar situation can be seen in the rampart from Stănțești (Fort 1, trench L1); it is the so-called *sandwich technique*, used and attested in other geographical and cultural areas³⁷¹.

such as grasses, when not eaten by herds, might have helped to protect the rampart against erosion, it is doubtful that plants were even allowed to grow on the rampart's surface because these would have attracted animal herds which would have contributed to their erosion” (Burke 2004, p. 110–111). We consider that given the paleoclimatic conditions of the East Carpathian area during the early Late Iron Age (and generally, Temperate Europe), vegetation growth on non-revetted ramparts would have been more or less *inevitable*.

³⁶⁷ See the discussion in Burke 2004, p. 103.

³⁶⁸ Harding 2012, p. 72–73.

³⁶⁹ In addition to agriculture which in many cases led to the strong flattening of the ramparts and ditches, leading them to be today poorly visible on the ground (see *Chapter III* with many examples), anthropogenic damage occurred also in forested areas. The felling or uprooting of trees with their roots on the rampart dislocates earth and causes damage; the phenomenon repeated over time leads to a significant decrease in the height. Logging that involves dragging of trees also leads to destructions in the defensive systems and the archaeological layer that is often very close to the surface, as we could see during our research in the hillfort of Albești.

³⁷⁰ The flattening is due not so much to the agricultural works as to the unfortunate tendency of some of the villagers to cross with the tractor or cart directly over the defense system, which has negative effects on this site, also severely affected by landslides.

³⁷¹ For example, in Bronze Age Middle East and Levant (Burke 2004, p. 105–106).

At Stâncești hillfort, inside the ramparts, are visible structures having the rough shape of trapezoidal prisms, made of strongly compacted clay layers – the *core*³⁷² (see also **Pl. 6/1,2,4**). The size ratio between the core and the rampart differs from case to case: thus, in Fort 1, in trench L 1, the core has a height of approx. 2/3 of that of the rampart; in other cases, for example in Fort 2, trench t1, the core is only 1/3 of the rampart, as in Fort 1 trench L. There are also differences in the position of the core inside the rampart. Sometimes it is positioned relatively centrally (see for example Fort 2 section t1 or Fort 2 section t5); in other situations, it occupies an eccentric position in relation to the axis of the rampart, being displaced towards its external part. The role of the core seems was to stabilize the rampart, and its presence in Stâncești can be explained in our opinion, by the significant dimensions of the ramparts in this particular site. The variations in size or positioning are explained according to the terrain particularities. It is interesting to note that the inclination of the core sides is broadly similar with those of the sides of the rampart that encapsulate it.

The discussions made so far are actually preliminary observations related to the structure and functionality of the rampart, based on the documentation we had and the small-scale excavations we conducted in Dobrovăț and Poiana Mănăstirii. A resumption of archaeological excavations in an interdisciplinary formula – collaborating with pedologists, geologists, palynologists and architects³⁷³ could provide us with much more valuable data, transforming even the most simple dump rampart into an “archive of documents” regarding the amount of technical knowledge existing in the early Late Iron Age, as A. C. Florescu anticipated decades ago³⁷⁴.

After approaching the ramparts, we intend to discuss in the following pages *the ditches*. Regarding the slopes of the ditches, we can see that the outer slopes (exposed towards the enemy) present values between 25° and 70° degrees. Since the value of 25° appears in S II from Cotu – Copălău, massive affected by flattening, we may exclude it from the statistic; thus we remain with ditch slopes that present everywhere outer declivities between 30° and 70°, with all having sectors of *at least* 40° slopes. Regarding the declivity of the inner slope of the ditch (facing towards rampart), the values oscillate between 25° and 70° degrees. In some situations, the outer slopes are steeper, in other cases the inner slopes are steeper, depending from case to case, but the differences are not significant. Regarding the shape of the ditches, we can distinguish two categories: *V-shaped* sharp profile ditches (attested in the Cotu – Copălău hillfort), respectively *trough-shaped* ditches (visible in the case of other sites). The depths of the ditches vary quite a lot between 1.6 m in Ibănești and 7.20 m in Stâncești. Their widths also oscillate, from a minimum of 3 m at Cotu – Copălău, to values of approx. 20 m to Stâncești.

How did the ditch look like in antiquity? It is difficult to give an answer, but some remarks can still be made on the basis of its filling. For example, in Cotu – Copălău, S II, the filling contains a series of soils described by the authors of the excavations as having an “alluvial” character. In our excavation in Dobrovăț, we could also notice at the bottom of the ditch the existence of small circular depressions – probably the result of puddles. All this leads us to believe that the ditches most likely had a muddy bottom (at least during rain seasons).

All the aspects discussed above, like high slopes, depth, the presence of mud on the bottom, turned the ditch into a significant obstacle. The data discussed, even if partial, give us some information and the possibility of making certain observation. Obviously, a careful digging of the ditch

³⁷² Florescu 2022, p. 66. The “core” is unlikely to represent an older phase of the rampart; if this were the case, an archaic vegetal layer formed in the period of its operation would have been documented in its upper part, or in the materials analyzed by us such a layer is not documented.

³⁷³ For the possibilities of modern interdisciplinary approaches on ramparts, see for example Sikora *et alii* 2019.

³⁷⁴ Florescu 2022, p. 31.

from hillforts, in an interdisciplinary approach, involving geologists and palynologists, could provide much more data³⁷⁵.

The total height of the obstacle is difficult to reconstruct considering that the palisade dimensions are impossible to establish and the original-built height of the rampart is again uncertain. The actual verifiable data, in which *only the depth of the ditch is archaeologically certain*, attest different values, ranging from a minimum of 2.60 m in Dobrovăț to a maximum of 12.20 m in the defensive system of Fort 1 from Stâncești. If we add to these values – hypothetically – two more meters, to compensate for the flattening of the rampart and the size of the top palisade, the values become significant, between 4.60 and 14.20 m. If the average height of a male warrior in the era was around 1.70 m, the height advantage these defenses offered to the defenders was between 2.70 and 8.35. Under these conditions, the military value of these defensive elements is undoubted, even if the enclosures themselves could have played other roles than “forts” or “fortified settlements”.

As we mentioned several times, there is very little archaeological information about the palisades at the top of the rampart. Even so, in the following we will make a series of observations based on the available data. We appreciate that in some cases – in order to avoid fire – the palisade was covered with a coating of clay, at least on the outside. In the Poiana Mănăstirii hillfort, we observed on the crown of the rampart remnants of burnt adobe with imprints, suggesting wooden beams with diameters between 30–35 cm. Also at Poiana Mănăstirii noticed in the section of the rampart the existence of some pits that start from the crest, approx. 60–80 cm deep, arranged relatively symmetrically, with diameters between 25–30 and 50 cm³⁷⁶.

Very interesting are the data obtained during our diggings at Dobrovăț-*Cetățuia* hillfort (Pl. 5/1–2; Pl. 7). As mentioned before, the rampart has very modest dimensions, being in fact a mere “pedestal” for the wooden palisade. The remains of the palisade appear in the form of a stripe of ash, charcoal and burned soil, with a width of approx. 40 cm reaching a depth (from the ground surface) of approx. 70 cm. Behind it, in the trench were observed two post-holes, forming an alignment perpendicular to the axis of the stripe, with diameters between 30–35 cm. Judging by these data, in the light of archaeological documentation, we can imagine at Dobrovăț a “palisade” built of wooden logs arranged horizontally, supported on the back by a system of stakes, which could also have maintained a small roundabout for the defenders.

V.2.3. Timber box ramparts at Arsura and Brăhășești hillforts?

In this chapter we will analyze the possible *timber box* rampart systems from our area of interest. The discussions will focus on two excavated sites, where such systems have apparently been documented: Arsura and Brăhășești.

For the hillfort of Arsura (Pl. 5/3) we found a series of data, quite brief, from the sectioning of one of the ramparts. The section documented the existence of a “bed” of stones, with a width of approx. 2.50 m and a thickness below 0.50 m, which apparently formed the foundation of the defensive system³⁷⁷. That this is a simple “bed” and not a “wall”, is proven by the small amount of stone, of moderate height, concentrated only in this specific feature. If a more massive structure existed, the amount of stone scattered in the archaeological layers would have had to be substantially larger. At the edges of this structure, on both sides, there are compact layers of “dense black earth”; inwards, these overlap a small layer of coal debris and a thin layer of soil with black pigmentation. Towards

³⁷⁵ And thus the ditch itself can also prove to be in itself an “archive” offering precious data about the site (see for example Golănová *et alii* 2020).

³⁷⁶ Berzovan *et alii* 2017, p. 319.

³⁷⁷ Teodor 1973, p. 54–55.

the outside, on top of the dark brown soil layer (probably the ancient vegetation layer / construction level), on a length of approx. 3 m, is a large layer consisting of black soil with burned debris, adobe and coal. Some pieces of burnt earth have parallelepiped shapes; the large amount of coal obviously came from a massive wooden structure³⁷⁸. No adjacent ditch was documented.

It is quite clear from the analysis of stratigraphy that the reports are describing a wooden and earth structure, based on a layer of stone, which during (or after) a fire collapsed, mostly towards the outside. It is true that no post-holes are documented in the narrow trench made by S. Teodor to certify beyond doubt that there are the remains of a timber-box rampart, but all the other elements described converge towards such a scenario.

At Brăhășești hillfort (Pl. 5/4), the existing archaeological section is relevant for establishing the characteristics of the defensive system. A significant amount of earth, burnt solder and crushed burnt solder was observed. Considering by the published plan can be distinguished two parallel rows of wooden stakes at a distance of approx. 1 meter apart. These stakes were apparently quite small in diameter (0.10-0.18 m), the structure being supported by a system of woven knots. Two defensive ditches were observed in front of this “earth and timber wall”³⁷⁹.

The actual number of hillforts from our area of interest defended by timber box ramparts could have been higher. As mentioned in the sub-chapter dedicated to theoretical issues, a rampart of this type is expected to leave behind a smaller “parabolic-shaped embankment” than in the case of dump ramparts. The modest “paraboloid” appearing in the form of a yellowish-sandy stripe with burn marks, having a fairly small width, appearing in the case of hillforts such as Victoria – Șanțul Caterinei or Scobinți-Grădiștea could represent rather the remains of a timber – box system than a dump rampart.

How tall could such a “wall” be? It is difficult to give a precise answer, and in Romanian historiography such approaches are lacking for now. In Poland, a calculation was made for the Early Iron Age Lusatian hillfort of Biskupin: here, for a timber-box rampart with a length of 3 m and a width of 3 m, supported by solid wooden beams, is estimated a height of approx. 5–6 m³⁸⁰. By comparison, for Brăhășești where all dimensions are approx. three times smaller (0.10-0.18 m diameter of the beam compared to 0.30 at Biskupin; approx. 1 m the width between the wooden paraments vs. 3 m at Biskupin) so we can assume an estimated total height of approx. 2 meters. If we add to this the depth of the ditch (approx. 1.50) from the ancient construction level, we reach a total obstacle height of approx. 3.50 m for Brăhășești hillfort. The value might seem, at first glance, rather modest; but if we take into account the slope of the outer ditch, which reaches significant declivities (approx. 30°–45° on the outside; 30°–60° on the inside), of the inner ditch (approx. 30°–40° on the outside; 55°–60° on the inside), at which we add the vertical obstacle of 2 meters, the efficiency of the defensive system from Brăhășești is beyond any doubt.

The presence of a large amount of burned material raises several questions. Was it caused by the burning of the wooden structure in the context of a siege, or possibly accidentally? A part of the visible material was thermally prepared by the builders of the hillforts, in order to use it as material for filling the timber-box? The problem is a delicate one, as there are arguments both for and against these hypotheses. Our opinion is that in order to respond adequately to this problem, many archaeological sections as possible are needed through the defensive system, in order to observe the amount and intensity of burned material for as many sectors of the sites as possible. To these field explorations, should be added complex interdisciplinary analyzes.

In the Carpato-Dniestrian area, timber-box ramparts were used in the Early Iron Age, being attested in the Cozia – Saharna culture³⁸¹. However, in the early stages of Late Iron Age this type of

³⁷⁸ Teodor 1973, p. 54–55.

³⁷⁹ Brudiu, Paltânea 1972.

³⁸⁰ Terlikowski et alii 2018, p. 240–241.

³⁸¹ Zanoci 2021, p. 103–104

fortification was not build frequently, at least between in the area between the Carpathians and Prut River³⁸². It remains see in the future if the archaeological researches will change these observations.

V.2.4. A *Pfostenschlitzmauer* and a dump rampart at Cotnari hillfort?

In this chapter we will discuss the defensive system from the Cotnari-*Cătălina* hillfort, more precisely the one found in *Enclosure A*. A. C. Florescu supported the idea that here was an earth rampart, the stone and wood walls existing inside its structure being nothing more than a simple foundation, with a reinforcing role. This hypothesis was generally accepted in the literature. We accepted this interpretation, even in our 2017 study, when we did not yet have access to the site archive³⁸³.

To clarify the issue of the defensive system, in the measure it can be done nowadays without new excavations, we accessed several documents in the archive: a section of trench SI with related plan, and a sketch of the stone wall (plan and elevation). To these we might add a large number of black and white photos, generally of very good quality. Their careful analysis, as well as the comparisons made with similar situations from other Iron Age hillforts in both the Carpathian-Danube and Central European areas, leads us to a different scenario than what Florescu previously thought.

What is obvious from the very beginning is the significant amount of stone, often present in the form of briefly shaped slabs, tied with soil (possibly clay) and arranged in the form of walls (see **Pl. 8**). The building technique is identical to the one we see in the case of the tumuli from Cucuteni necropolis. This care in execution is inexplicable in the context in which these walls would have had the simple purpose of supporting a rampart, being covered by tons of dirt. It is difficult to accept a scenario in which the builders displace and collect thousands of stone slabs, shape them and give them a somewhat regular shape, build them carefully by gluing them with yellow earth, only to cover their entire work³⁸⁴. However, how can be explained the presence of these stone walls in the context in which today on the surface are visible only some massive ramparts?

The northern section of trench SI (**Pl. 9/1**) can give us precious clues, as well as the other sketches and a series of photos which helped us to follow the evolution of the fortifications of the *Enclosure A* from Cotnari. In a first stage, a “wall” was built, composed of two facings made of stone slabs briefly shaped and glued with yellow earth, supported on either side by wooden pillars (**Pl. 9/2**). The sand and stone plinth between these walls was in turn reinforced with wooden beams, probably arranged in the form of a network. The distance between the wooden pillars that supported the stone walls on the outside does not seem to have been too great – approx. 0.70–0.80 m. Judging by the depth of 0.50–0.80 m at which these pillars were deepened, correlating it to the stone wall, we suspect that its total height will not have been greater than approx. 2 meters. Even if was not larger than 2 meters in height, the wall was representing a formidable obstacle (**Pl. 10, 11, 12/1**). In any case, this type of wall is actually the common “*Pfostenschlitzmauer*”, widely attested in the hillforts of the Early and Late Iron Age in large parts of Europe.

So far the defensive system from Cotnari, *Enclosure A*, was considered the result of an original technological conception, or the result of the influence of some Greek craftsmen as has been

³⁸² A relative similar phenomenon, of abandoning the timber-box style ramparts in favor of dump ramparts and glacis defense can be seen in some European areas (for ex. southern Britain) in the 4th–3rd centuries BC period (Brown 2009, p. 66–69; Harding 2012, p. 72–73). On the other hand, in Central Europe we notice the proliferation in this period of various types of ramparts using wood and stone in various quantities and combinations.

³⁸³ Berzovan 2017, p. 65.

³⁸⁴ It is true that in other chronological timeframes and geographical areas (for ex. Bronze Age Middle East and Levant) dump ramparts often benefit from retaining walls, usually built towards the extremity of the slope. But these retaining walls are *only a few courses high* and *no longer than few meters* (Burke 2004, p. 111). The so-called “core-walls”, when present, are meant as foundation to the crest walls, presenting continuity with them. In any case, the situations cannot be compared with the one from Cotnari-*Cătălina*. In Central and Western Europe, the presence of “walls” in the excavated dump ramparts (be it “*murus gallicus*” or other type) is explained as an older phase superimposed by the dump rampart (Krausz 2019, *passim*).

suggested on other occasions³⁸⁵. Searching into the literature, the stone wall at Cotnari has many analogies in Iron Age Temperate Europe: for example, in Glauberg³⁸⁶ (Hesse, Germany), Limburg³⁸⁷ (Hesse, Germany), Kellheim³⁸⁸ (Bavaria, Germany), etc. (see also **Pl. 12/2–5**). In the Carpatho-Danubian area, walls with one or two stone facings are attested from the beginning of the Early Iron Age. We find them both in the area of Gava – Holihrad culture in places like Călinești Oaș-Dealul Hurca (Satu Mare County), Tusnad–Piscul Cetății (Harghita County), etc., but also in nowadays Oltenia at Grădiște-Cetatea Muierii (Vâlcea County) or Portărești-Cetățuia (Dolj County)³⁸⁹. For the beginning of the Late Iron Age, walls with two stone facings appear at Căscioarele – Dăia Parte³⁹⁰ (Călărași County) but also at Satu Nou – Valea lui Voicu³⁹¹ (Constanța County).

Returning to the plan and section from trench S I, we notice behind the stone wall a deepened ditch. The rear position of the ditch in relation to the wall – the first defensive line – is a strange situation, but it could be explained by the existence of a secondary line of defense, consisting of a palisade or simple wooden fence, suggested by a series of agglomerations of adobe. Based on these data, we tried the idealized reconstruction of the aspect of this first stage of fortification of the *Enclosure A* of the Cotnari fortress (**Pl. 9/2**).

The same section shows us that the stone wall was demolished, part of the emplecton collapsing to the outside, where it fell short on the hillside, another part of it falling in the inner ditch. Both the ditch and the remains of the stone wall were leveled. Thus, if the wooden pillar in front was cut off but remained in the pit, the pit in the back was filled with stone. The visible rampart was raised over all this leveling, probably at a time when there were no resources or motivation to rebuild and maintain the old wall, or more serious military need dictated it (**Pl. 9/3**).

Certain statements from the studies published by A. C. Florescu, as well as certain site photography, continue to raise questions. After a careful study of the images, we noticed that in several photos is visible what at first glance seems to be the circular base of a tower, maybe a bastion (**Pl. 13/3; Pl. 14/1**). Several questions remain regarding the issue of the so-called stone walls perpendicular to the main wall, observed in the SE area of the enclosure (**Pl. 14/2**). Unfortunately, the absence of intelligible drawings does not allow us to offer very clear answers regarding the appearance and purposes of these arrangements. However, we cannot fail to note that such walls have also been found in other Iron Age fortifications, such as the Trisov oppidum³⁹² (Cesky Krumlov, Czech Republic). At Trisov, the perpendicular wall *a* may have had a roundabout above it, but *b* not (**Pl. 14/3**). The role of these walls could have been to break through enemy battle formations, forcing them to fragment in their path to the main defense wall.

V.3. Constructing the hillfort and its defenses

Any attempt to build a hillfort implies from the beginning the existence of a community capable and willing to make a collective effort, directly proportional to the size and complexity of the defensive systems. Without a certain degree of social aggregation, given either by the existence of strong elites or a strong communitarian ethos, hillfort building is impossible.

The location chosen for the building could have been determined depending on a number of pragmatic factors: favorable geographical conditions, proximity to certain natural resources or settlements, strategic-military position, etc. The building of a hillfort could be *programmatic*, or

³⁸⁵ Ursulescu 2017a, p. 140, note 4.

³⁸⁶ Baitinger, Kresten 2012, p. 496, Abb. 2.

³⁸⁷ Ballmer 2018, p. 139.

³⁸⁸ Ballmer 2018, p. 136.

³⁸⁹ See Zanoci 2015, pp. 72–78.

³⁹⁰ Sirbu, Damian 2016, p. 168–172; See Sirbu, Trohani 1997, p. 512–539.

³⁹¹ Conovici, Irimia 1998.

³⁹² Jiří 1966.

could come *organically*, as in time a certain unfortified settlement grows, accumulates capital and thus appears the possibility of strengthening its position in the political and social landscape through the addition of fortification works. When economic and social conditions decayed, the fortifications might be abandoned, and such scenarios are assumed by A. Florescu and M. Florescu for the Stâncești hillfort³⁹³.

On the other hand, we cannot exclude other subjective factors involved in choosing a certain position and deciding to build a certain structure in a particular place. In the mentality of pre-modern populations all across the globe, the magical and religious elements played an extremely important role in relation to the surrounding geographical landscape. The construction of cities, fortresses or temples in a given place was not always done on the basis of geographical determinism or based on pure economic reasons, but was often within the framework of a sacred geography. In such a framework, the “goodness” or “badness” of certain locations comes from the subjective experiences of the community or its representative members (rulers, specialists of the sacred, etc.), stemming from their capabilities at interpreting through various “signs” the will of the supernatural beings (gods, spirits, heroes, *genius loci*, etc.) that are supposed to rule the physical existence and tangible universe. The ancient world knew numerous myths related to the founding of settlements and cities³⁹⁴. Fragments of such mentalities survive in the ethnographic memory up to this day in the East Carpathian regions of Romania³⁹⁵.

Beyond these general observations, are there any concrete archaeological arguments for speaking for the influence of *sacralized geography* in our area of interest? As we mentioned in the previous chapter, tumuli are often present near or inside some of the hillforts; as we have pointed out, they could be the graves of the founders, of heroic ancestors, or simply valued *places of remembrance* from earlier times. In any case, by enclosing a site, a special place was defined, distinct from the outside world, the defensive system or the interior being imbued with symbolical power³⁹⁶.

After choosing the place, regardless of the motivation, this must be prepared by clearing vegetation and leveling. Prior to the construction of the rampart and ditch, the area could be further prepared by burning (for pragmatic, maybe also ritual purposes). For example, in the research from Poiana Mănăstirii hillfort we observed the existence of a strip of ash and burning at the base of the rampart. At Bunești hillfort, towards the inside the settlement, at the base of the rampart, a burial tomb was reported at a depth of $-1.9 / 2$ m, partially disturbed, with an incomplete skeleton, oriented SE-NV, which had an iron object near its knee and a bitronconic spindle whorl³⁹⁷. Of course, without the existence of archaeological plans, it is difficult to provide any interpretation, but we wonder whether we are dealing with a *foundation sacrifice*, as are situations documented in the prehistory³⁹⁸.

How long did it take to build the rampart and the ditch? Any clear estimate has to take into account the amount of earth (in cubic meters) as well as the amount of available manpower. If the first variable can be calculated (within an acceptable margin of error), the second variable remains for now only an educated guess³⁹⁹. In any case, for forts with large defensive systems such as Stâncești or Cotnari, we may assume that hundreds, if not thousands of individuals were involved in building the complex features.

³⁹³ Florescu, Florescu 2005, p. 151–159.

³⁹⁴ See for example the legends surrounding the founding of Rome by Romulus and Remus, of Thebes by hero Cadmus of Tyre, of Tbilisi by king Vakhtang Gorgasali, and many others.

³⁹⁵ For example, the Putna monastery (Suceava county) was allegedly built where the arrow fired by Stephen the Great fell; Bujorani Monastery (Vaslui County) was built in the place where the donkey of the Transylvanian shepherds who came in transhumance suddenly stopped in its way, etc.

³⁹⁶ Brown 2009, p. 31.

³⁹⁷ Teodor *et alii* 2002, p. 92–93.

³⁹⁸ Lazarovici 2009, p. 240; Kovács 2016, p. 302–303.

³⁹⁹ For an attempt of calculating the effort for building an early Late Iron Age hillfort, see Scherf, Mewes 2021, p. 31–54.

Any rampart needs large quantities of wood, even dump ramparts need it for the palisade. As we mentioned earlier, in 2019 we participated as consultants for the building of an archaeological park with a replica of an Iron Age fortress. For a simple and solid palisade, consisting of rows of wooden pillars and a guard road we calculated 360 cubic meters of timber / 250 linear meters of rampart, that is, 1,44 cubic meters of timber / 1 linear meter of rampart. We may safely assume that a more complex palisade, with defense towers, or a timber-box rampart would require larger amounts of wood.

For the extraction of large quantities of wood necessary for building timber structures of such magnitude, tended woodlands are needed⁴⁰⁰. Untended woodlands give a low yield of timber that is of appropriate size and quality. This implies the existence of empirical knowledge of forestry, of groups and even communities specialized in this niche; another proof that large hillforts can only be produced by societies that have reached a certain degree of organizational complexity. In order to be used in construction, the wood must be cut and prepared. Normally, in order to build a solid wooden structure, it is necessary to use seasoned wood; the use of unseasoned wood to build a timber box rampart would be very risky in terms of strength of the structure over time.

In any case, construction of the rampart represents a major communitarian effort, possibly also a force for social solidarity, regularly reinforced if the ditch has to be cleared out and the rampart repaired⁴⁰¹.

V.4. Defending and attacking hillforts

As we pointed out in the previous subchapters, regardless of their primary functionality, the hillforts, being sites with complex defensive systems (ramparts, ditches, etc.), had indisputable military valences. How effective were they against the military challenges of the time?

As the archeological discoveries showed us, the arsenal of the time seems to be quite rich: spears (Pl. 27/3), lances (Pl. 27/1–2), javelins (Pl. 26/3–4; Pl. 27/5), axes (Pl. 26/1,2; 6–12), but especially bronze arrowheads (Pl. 26/13–21) were discovered in almost all the archeologically investigated sites. The landscape is no different from other parts of temperate Europe, with the fact that so far, no armor or parts of siege engines have been found in the hillforts analyzed by us.

The relatively large area covered by most of the sites, the existence of numerous “empty spaces” between the houses certainly allowed, at need, the refuge of a large population from nearby village communities, including for the herds of animals. It is possible that in the same empty spaces subsistence farming could be practiced. All these features conferred a certain capacity for resistance to prolonged sieges, at least in the case of larger hillforts.

There is a question related to the fact if the fortifications with an area of more than 10–15 hectares could be effectively defended, since experts’ opinions are divided⁴⁰². In our opinion, the situations are quite complicated, depending on an equation with many unknowns: the existing human potential of the defenders (and the ability to deploy and concentrate forces as needed along the entire length of the defense system), versus the attackers’ ability to distribute and concentrate their assault in order to create a local superiority that would allow overcoming and breaching the defenses. We can assume that since the construction of hillforts involved a large human potential, this potential could have been used just as well in their defense.

The rampart and ditch system offered multiple military advantages. The enemy could no longer attack a wall with assault rams. Transporting them over the ditch and then up the slope of the rampart to the palisade is difficult to conceive. The use of stairs must have been just as impractical. For all these reasons, later in history, when facing the Roman war machine driven by Caesar, the Gauls give up the famous “Murus Gallicus” and adopt the dump ramparts doubled by ditches and

⁴⁰⁰ Reynolds 1995, p. 200–201.

⁴⁰¹ Collis 2010, p. 31.

⁴⁰² See the discussion in Neustupný 2006, p. 2–3.

palisade⁴⁰³. Often the earlier “Murus Gallicus” becomes encapsulated in the newer, massive, dump ramparts, acting as a core. This situation makes us wonder whether in the case of Cotnari-*Cătălina*, the deterioration of the military situation would have determined, in the same way, the abandonment of the *Pfostenschlitzmauer*, with its remains encapsulated in a dump rampart, much more efficient in defending against sieges.

How did these hillforts eventually fall? At least in the case of the hillfort from our area of interest, there was a quite obvious “Achilles’ heel”: *the gate area*. With a simple structure characterized often not only by an interruption in the rampart, but also in the ditch, the entrances appear to be extremely vulnerable to an enemy attack. By concentrating their efforts in the gate area, with enough strength and determination, the enemies could force their entry into the enclosure relatively easily, without having to assault the ditches and the rampart. It may appear surprising to us that the hillfort builders did not take this into account, building additional defensive systems around this vulnerable area. We can imagine that the needs of that time may not have been so pressing, with conflicts involving occasional intertribal skirmishes and possible raids by mounted nomads coming from the east, in front of which existing systems proved, at least for a while, to be sufficient.

⁴⁰³ Krausz 2019, p. 169–175.

■ CHAPTER VI. LIVING IN THE ENCLOSURES. STRUCTURES INSIDE THE HILLFORTS

VI.1. Spatial organization of structures

The data we collected on the spatial organization of the interior of the fortifications are quite reduced; the excavations carried out were limited, as were the magnetometric scans and archaeological surveys. However, we can make several observations for some of the sites.

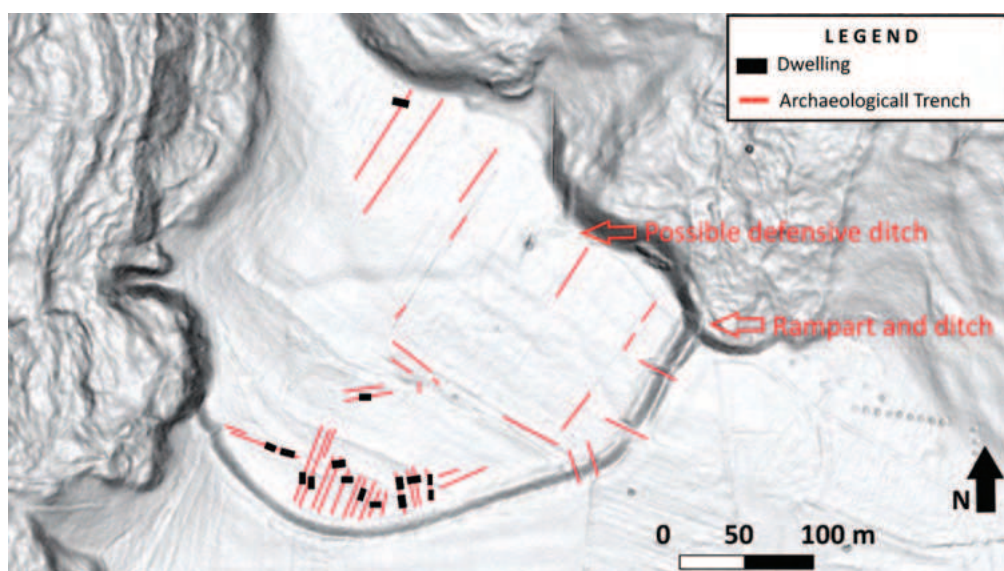


Figure 1. Cotu – Copălău hillfort. Disposition of archaeological trenches and dwellings from the early Late Iron Age Period.

At Albești-*Cetățuia* hillfort, as visible in our test-trenches from 2021, the density of habitation inside the enclosure was not agglomerated. At Bunești, 30 or more dwelling were found; according to the author of the excavations these were arranged in rows⁴⁰⁴. In Cotu–Copălău hillfort the habitation density seems also quite reduced. The dwellings are not organized in any particular order, although some small groups may still be observed. The same relatively low density of habitation can be noticed in the case of *Enclosure A* of the fortress from Cotnari-*Cătălina*. Regarding the site from Dobrovăț-*Cetățuia*, we excavated a rather small area from the central plateau, where we were able to document two surface dwellings, located at a distance of approx. 10 m one from another; they seem to be similarly oriented. At Poiana Mănăstirii hillfort, the magnetometric scan made by C. Mischka and I. Tasimova covered around 1/3 of the total surface; a low density was observed, with maybe a sporadic grouping of houses. At Stâncești on the other hand, the magnetometric scan made by D. Ștefan inside Fort 1 offered a different image, of a richer density of habitation.

⁴⁰⁴ Bazarciuc 1983, p. 211.

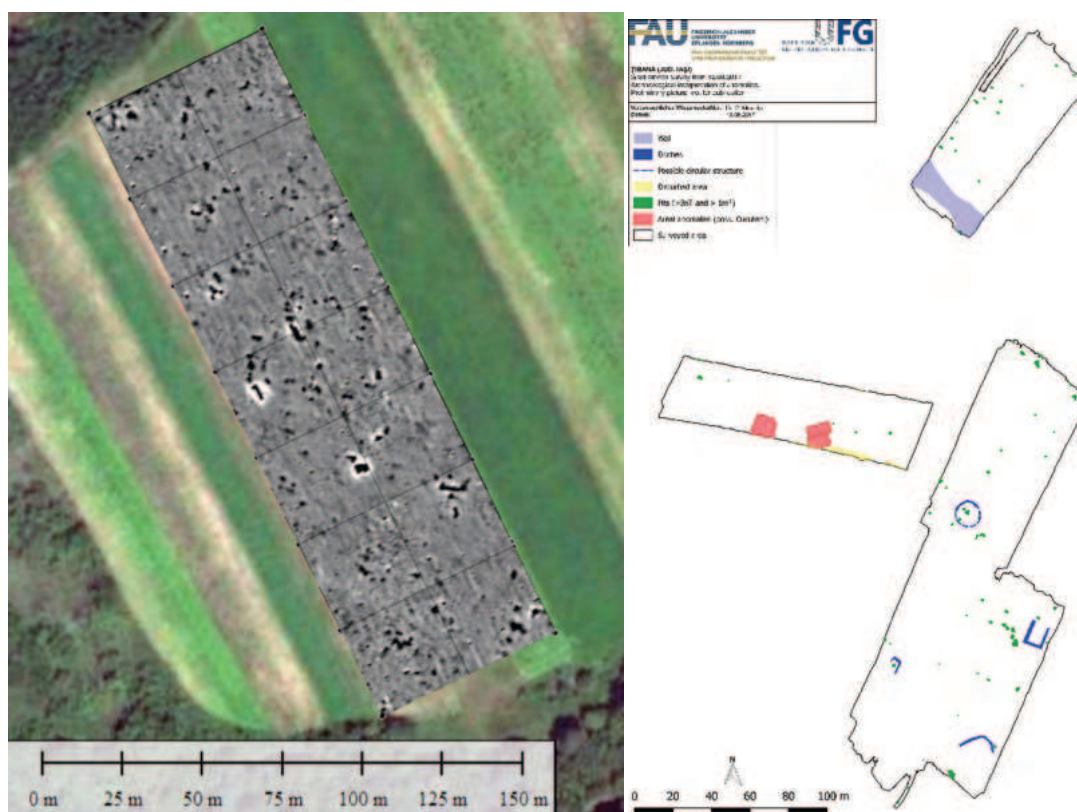


Figure 2. **Left:** geomagnetic scan inside Fort 1 from Stâncești with numerous potential dwellings and other structures being visible (Dan Ștefan); **Right:** interpreted geomagnetic scan inside the hillfort of Poiana Mănăstirii with dwellings and other structures being marked (C. Mischka, I. Tasimova).

Overall, with the possible exception of the Bunești fort⁴⁰⁵, we cannot observe a coherent placement of the dwellings / structures inside the enclosures. We cannot speak of a systematization, and as a consequence we cannot consider these hillfort phenomenon as “proto-urban”, no matter how we would choose to define this term.

What information can this spatial distribution of dwellings (and possible dwellings) give us about social organization? It was a nucleated or a dispersed type of society? It is considered in the studies related to habitat that dispersion enshrines an idea of individuality, while nucleation derive from communality⁴⁰⁶. At first sight, at Poiana Mănăstirii it was a model characterized by *dispersion*. In the case of Cotu-Copălău and Stâncești what we seem to have is *nucleation with dispersion*⁴⁰⁷. Both models are considered typical for *rural farming areas*, with social ties formed around memberships in a certain clan or extended family. An exception seems to be the hillfort of Bunești. It is true that we do not have published plans at the moment, but the existence of a large number of dwellings on a relatively smaller area suggests a higher population density than in the other researched sites and a greater degree of nucleation and stronger social ties.

The above observations corroborates with the observation that with the notable exception of Bunești, the habitat and discoveries inside the hillforts do not differ from those from the rural area. There are no traces of systematization, no delimited craft areas and sacred areas, and lastly, no traces of roads or squares were identified. From this point of view, the fortifications analyzed by us differ from those built by the “barbarian” populations in Central and Eastern Europe in the same timeframe

⁴⁰⁵ Since the information is only mentioned in writing and not supported by any plan, it has to be taken with some caution, especially since the documentation and data coming from the excavations of V. Bazarciuc is in many ways problematic.

⁴⁰⁶ Roberts 1996, p. 35.

⁴⁰⁷ For a definition, see Roberts 1996, p. 22.

– often defined as “proto-urban”, differing also in comparison to the structures that will be built a few centuries later in the “classical” period of pre-Roman Dacia. If the East Carpathian hillforts analysed by us are not “proto-urban”, they might as well be considered “large fortified villages”.

It is also worth noting *the absence so far of any grandiose buildings*, be they “palaces” or “noble residences” or “temples”. It is true that there are surface dwellings with sometimes large sizes (at Stâncești, for example), but their inventory or architecture does not separate them from the rest. Of course, this situation may be due to the current state of research. This is somewhat in contradiction with the data provided by the analysis of the funerary discoveries, where the social differences are quite significant. Those buried, for example, in the necropolis from Cucuteni – *La Pietrărie / Gosan*⁴⁰⁸, who owned the set of gold ornaments, the harness objects from the Cucuteni– Băiceni hoard⁴⁰⁹, or the diadem found in Bunești hillfort⁴¹⁰ had a completely different status than the ones buried in flat necropolises, such as the one from Strahotin⁴¹¹ or Slobozia⁴¹². If social differences existed, reflected in the treatment of the dead, why there is not a proportional reflection of them in the world of the living? This is an issue on which we should reflect and maybe the future research might bring about plausible explanations.

VI.2. Domestic structures inside the hillforts

VI.2.1. The dwellings. The data from the literature

In the first part we will present the data obtained from older excavations. First of all, the quality of archaeological documentation differs from one case to another. We notice that only a single dwelling plan had been published from Cotu-Copălău, but for Stâncești there are published several plans, some of them quite detailed, supplemented by descriptions on which useful remarks can be made. In contrast, on the dwellings found in the forts of Cotnari, Bunești or Bazga hillforts, we have limited data.

Nr.	Type	Shape	Size	Heating installation / positioning
1	Surface	Rectangular	?	?
2	Deepened	Rectangular	6.7 m × ?	Hearth / NE corner
3	Surface	Rectangular	5 × 6 m	?
4	Surface	Rectangular	5 × 6 m	Hearth / NV corner
5	Surface	Rectangular	3.50 × 6.50 m	?
6	Deepened	Rectangular	5 × 6 m	Hearth / NV corner
7	Deepened	Rectangular	5 × 6.5 m	?
8	Deepened	Rectangular	4 × 6 m	?
9	Pit-house	Circular	5.10 × 5.16 m	Hearth / N sector
10	Surface	Rectangular	approx. 5 × 6 m	?
11	Deepened	Rectangular	?	?
12	Surface	Rectangular	4 × 5 m	?
13	Surface	Rectangular	?	?
14	Surface	Rectangular	?	?
15	Pit-house	Rectangular	2.60 × 3.20 m	Hearth / NE corner

Table 1. Dwellings in the fort of Cotu-Copălău hillfort (data taken from Șovan, Ignat 2005).

⁴⁰⁸ Dinu 1982, p. 30–32; Dinu 1995, p. 103–126.

⁴⁰⁹ Petrescu-Dîmbovița, Dinu 1975, p. 105–124.

⁴¹⁰ On this artefact, see the discussion in *Chapter IX* of our volume.

⁴¹¹ Berzovan *et alii* 2020c, p. 55–101.

⁴¹² Buzdugan 1968, p. 77–94.

The issue of typological classification of the dwellings is complicated by the terminology used in the literature⁴¹³. There are no clear definitions for terms such as “half pit-house” and “pit-house” respectively⁴¹⁴. We preferred to resort to a subjective convention, namely to use the term “deepened dwelling” to define those situations when the floor is at a depth of -0.15 to 0.50 m from the ancient level ground, respectively the term “pit-house”, when the floor is more than half a meter deep.

In the Cotu-Copălău hillfort were identified 15 houses, mostly surface dwellings or slightly deepened; only two can be included in the category of the pit-houses (*L 9* and *L 15* respectively). Their dimensions, where they could be established, are relatively similar, ranging from 22.5 to 30 square meters; only *L 15* has a slightly smaller surface area of approx. 8.32 square meters. Regarding their shape, except *L 9* which had a circular plan, the others are rectangular⁴¹⁵. Seven of the fifteen dwellings were reported as having hearths or traces of hearths placed in the northern area. As for the construction technique, the published information is scarce. The floors seem to be made simple, from compressed earth without special arrangements. The presence of burnt clay indicates the existence of adobe walls, but the absence of pole pits, which can be explained by the more modest degree of conservation of traces, does not allow detailed discussions about the dwellings architecture.

The archaeological researches in the Stâncești hillfort brought to light a relatively large number of dwellings, the authors presenting them according to the three major chronological stages of these great fortifications. We will also present them below, as synoptic table.

Nr.	Numbering (after the authors)	Type	Shape	Size	Heating installation / positioning
1	Sbd. 1	Deepened	Ovoidal	3.4 × 3 m	?
2	Sbd. 2	Deepened	Ovoidal	4.40 × 3.80 m	?
3	Sbd. 3	Deepened	Aprox. rectangular	4 × 3 m	?
4	Sbd. 4	Deepened	Ovoidal	5.50 × 4.30 m	Hearth / E corner
5	Sbd. 5	Deepened	Ovoidal	5 × 3.50 m	Clay oven
6	Sbd. 6	Deepened	Rectangular	5 × 2.75 m	?
7	Sbd. 7	Deepened	Approx. Rectangular	3 × 1.4–2 m	Hearth / S corner
8	Sbd. 8	Deepened	Approx. Ovoidal	3 × 3.50 m	Hearth / N corner
9	Sbd. 9 (13)	Deepened	?	?	Hearth / central
10	Sbd. 10 (15)	Deepened	Circular	Diam. 4.50 m	Stone oven (?)
11	Sbd. 11 (16)	Deepened	?	?	Hearth / S corner
12	Sbd. 12 (17)	Pit-house	Ovoidal	4.50 × 3.50 m	Hearth / Central (?)
13	Sbd. 13 (21)	Deepened	Ovoidal	3.50 × 3.25 m	Hearth / Central
14	Sbd. 14 (23)	Deepened	Ovoidal	7.50 × 4.50 m	?
15	Sbd. 15 (25)	Deepened	?	4 × 4.10 m	Hearth / W corner
16	Sbd. 16 (28)	Pit-house	Ovoidal	5.50 m	?

Table 2. Dwellings from the 1st phase of Fort I from Stâncești (dated by authors in 6th–5th centuries BC).

For the first phase of Fort 1 from Stâncești, are almost exclusively deepened dwellings and pit-houses. Most of them have an ovoid shape, varying in size between 6 square meters and approx. 33 square meters. The singular 6 square meters dwelling can be interpreted as a possible temporary shelter. Heating installations (mainly hearts) are present in almost all cases; there is no preference

⁴¹³ See a more in-depth discussion on this issue at Haheu 2016, p. 182–183.

⁴¹⁴ Sometimes the authors themselves fail to distinguish these categories very clearly; to give only one example (Florescu, Florescu, 2005), in the legend of Plate 34 we have mentioned the “semi-pit-house 13” while in the corresponding drawing appears written “pit-house 13”.

⁴¹⁵ Șovan, Ignat 2005, p. 19–23.

regarding their plan. It is worthy to note the presence of a clay oven and a possible stone oven. About the architecture of dwellings, the data is scarce. Sometimes in center of the dwelling a post hole is found⁴¹⁶. Some white loam is mentioned as present on some burnt adobe fragments⁴¹⁷. The floors were without any arrangements.

Nr	Numbering (after the authors)	Type	Shape	Size	Heating installation / positioning
1	L I	Surface	?	?	Hearth / SSE corner
2	L II	Surface	?	12.6 × 6 m	Hearth / SW corner
3	L III / 1	Surface	?	10.5 × 6 m	Hearth / Central
4	L IV / 1	Surface	?	30 m ²	?
5	L V / 1	Surface	?	3 × 2.50 m	Hearth / Central
6	L VI / 1	Surface	Rectangular	5 × 4 m	Hearth / Central
7	L VII / 1	Deepened	Rectangular	6.25 × 5 m	?
8	L VIII / 1	Surface	Rectangular	6.50 × 4 m	Hearth / Central

Table 3. Dwellings from the 2nd phase of Fort 1 from Stâncești (dated by authors in 4th century BC)

Surface dwellings or slightly deepened dwellings reported for the second phase of Fort 1 have dimensions ranging from 7.5 to 75 square meters, generally having a rectangular shape. The placement of hearths does not seem to follow any specific pattern; they are present especially in the central area. In case of L VIII / 1, the hearth had a rectangular shape, slightly elevated by a layer of plumage, covered by successive soldering of sandy yellow clay⁴¹⁸. It is possible that some of these dwellings had two rooms⁴¹⁹.

Nr.	Numbering (after the authors)	Tip	Shape	Size	Heating installation / positioning
1	Sbd. 17 (7 a)	Deepened	Ovoidal	3.75 × 4.25 m	Hearth / Stone oven (?)
2	Sbd. 18 (8 a)	Deepened	Circular	4 × 4.10 m	Hearth / Central (?)
3	Sbd. 19 (9)	Deepened	Ovoidal	5 × 4 m	Hearth / N corner
4	Sbd. 20 (10)	Deepened	Ovoidal	3.75 × 4.25 m	Stone oven (?)
5	Sbd. 21 (14)	Pit-house	Ovoidal	6 × 4 m	?
6	Sbd. 22 (18)	Pit-house	Elongated ovoidal	5.50 × 3.25 m	Hearth / Central (?)
7	Sbd. 23 (19)	Pit-house	Ovoidal	4.80 × 3.70 m	Clay oven
8	Sbd. 24 (20)	Pit-house	Ovoidal	4.50 × 3.50 m	Hearth / Central (?)
9	Sbd. 25 (22)	Deepened	Ovoidal	6.25 × 4.50 m	Hearth / Central
10	Sbd. 26 (24)	Deepened	Ovoidal	5 × 4 m	Hearth / S corner
11	Sbd. 27 (26)	Pit-house	Ovoidal	4 × 3.60 m	Hearth / NV corner
12	Sbd. 28 (27)	Pit-house	"Pear-shaped"	5.20 × 5 m	Clay oven
13	Sbd. 29 (29)	Deepened	Ovoidal	3 × 3.50 m	Hearth / Central (?)
14	Sbd. 30 (30)	Deepened	Ovoidal	2.30 × 3.40 m	?

Table 4. Dwellings from the third phase of Fort 1 from Stâncești (dated by authors in 3rd century BC).

⁴¹⁶ Florescu, Florescu 2005, p. 30.

⁴¹⁷ Florescu, Florescu 2005, p. 41.

⁴¹⁸ Florescu, Florescu 2005, p. 42.

⁴¹⁹ Florescu, Florescu 2005, p. 41.

For the 3rd stage of the Fort 1 of Stâncești, we have, according to the authors, only deepened dwellings and pit-houses. Generally, they have an ovoid shape, and sizes that vary between 10 and 28 square meters. The hearts are generally placed in the central area; we noticed the presence of a possible stone oven and clay ovens. In general, the floors were not arranged; only for Sbd. 19 and 22 a thin layer of puddle was added.

Nr	Numbering (after the authors)	Type	Shape	Size	Heating installation / positioning
1	L I (IX) / II	Surface	?	7.50 × 6.50 m	Hearth / Central
2	L II (X)	Surface	Rectangular	7 × 6 m	?
3	L III (XI)	Surface	Rectangular	9 × 7 m	?
4	L IV (XII)	Surface	Rectangular	7.20 × 6.10 m	?
5	L V (XIII)	Surface	Rectangular	2.70 × 3.60 m	Hearth / N corner
6	L VI (XIV)	Surface	Rectangular	3.60 × 3 m	Hearth / Central
7	L VII (XV)	Surface	Rectangular	2.90 × 3.10 m	Hearth / Central
8	L VIII (XVI)	Surface	?	4.30 m × ?	?
9	L IX (XVII)	Surface	?	?	?

Table 5. Dwellings from Fort 2 of Stâncești (dated by authors during the 4th century BC).

In Fort 2 from Stâncești were excavated several surface dwellings with a variable conservation degree (see **Pl. 15**). Of rectangular shape, they have dimensions ranging between approx. 9 and 63 square meters. Some dwellings such as L II (X) seem to have had two rooms; L III (XI) it is likely to have a porch. The more modest conservation degree does not allow too much discussion about the hearths; however, in LV (XIV) the heart was raised from the floor by adding an extra layer of puddle. The floors were not adjusted; only in the case of L I (IX) / II a thin layer of puddle was added.

In the hillfort of Bazga, the archaeological researches led by V. Merlan revealed several dwellings, but in the absence of the published plans, we cannot make any considerations⁴²⁰.

More than 30 rectangular dwellings with slightly depend floors were reported in the hillfort of Bunești⁴²¹. They are described as having variable dimensions, ranging from approx. 10 to 12 m in length / 6–8 m in width, with hearts made of adobe and river stones positioned in the northern corners, usually of almost circular shape⁴²².

VI.2.2. Dwellings. Data obtained from our own excavations

Regarding the fortress of Poiana Mănăstirii, on the magnetometric prospection several anomalies were visible, susceptible to be actually traces of some burned surface dwellings. On the occasion of the researches carried out in 2017, we found that the conservation status of these vestiges was modest, the remains of the burnt adobe (some with beam marks) being scattered on quite large surfaces by the deep struts.

More interesting results were obtained at Dobrovăț, where two dwellings were excavated inside the hillfort: **L 1 / 2019** and **L 2 / 2021**. Surface dwelling **L 1 / 2019** was located inside the enclosure; the partial collapse of it, as a result of landslides, determined that only a part of it was possible to excavate. The house appeared in the form of post-hole alignments, that frame a clump of fallen burnt adobe, resulted from the ruining of the walls. Judging by the pits diameter, two categories of posts were used in the support structure of **L 1**. Pits with diameters of almost 0.40 m and depths of approx. 0.25 m from the discovery level, could have had poles with diameters between approx. 0.25 m and

⁴²⁰ Merlan 2010, p. 37–39.

⁴²¹ Babeș 1994, p. 225.

⁴²² Bazarciuc 1983, p. 211

0.30 m (edged trunks?); the smaller one held a smaller pillar. The hearth, rather poorly preserved, was located at the southern end of the house⁴²³. The floor was not adjusted in any ways. The inventory consisted mainly of local pottery (highly fragmented) and animal bones (especially *Bos Taurus*).

Surface dwelling **L 2 / 2021** (Dobrovăț) (**Pl. 16/1–2**) was discovered at approx. 10 m south of **L 1**. Also in this case, unfortunately, the landslides that affected the plateau did not allow us to excavate the entire surface. Several postholes were observed, of which two parallel strands were distinguished. Their dimensions are similar to the ones determined in **L 1**. The remains of burnt adobe (wall debris) are concentrated to the east, suggesting a collapse of the walls in that direction. The hearth was not found. The total dimensions of this surface dwelling remain difficult to estimate. The floor was not adjusted in any ways. The inventory consisted mainly of local pottery (highly fragmented) and animal bones (especially *Bos Taurus*).

On the occasion of the researches from Albești carried out in 2021, we were able to document another surface dwelling **L 1 / 2021** (Albești) (**Pl. 16/3–5**). The trench was placed inside the enclosure. The postholes – of variable size – indicate a rectangular contour and a size of approx. 7 × 5.50 m; it likely had two rooms. The poorly preserved hearth was located in the northern area. The remains of the upper parts of the collapsed walls appeared in the form of an agglomeration of burnt adobe and charred beams.

Of particular interest is the burnt adobe collected from the upper part of the south-east wall of the house. This shows impressions on three sides from the wooden beams used in construction (**Pl. 16/6**). The analyzed burnt adobe sample has a length of 51 cm, being made up of several pieces. On one side it has an impression with a width of about 5 cm which we assume comes from the wattle that supported the eaves of the house and stretched to the top of the southeast wall, across the width. The second impression indicates the presence of a 9 cm beam in width, which ran parallel to the one shown above, and rested on the corner pillars of the dwelling **L 1**. The third impression on the batch analyzed has a width of about 18,5 cm and we assume that it comes from a split beam, its initial position being in the middle, along the entire length of the house. The existence of the split beam implies the existence of a ceiling. The floor of the dwelling was not adjusted in any ways. As for the archeological material discovered, it consists of a few local ceramic fragments.

VI.2.3. Pits and other categories of features

Archaeological research carried out inside the hillforts also led to the discovery of some supply / household pits. In Stâncești but also in Cotnari, they are usually associated with dwellings; at Cotnari-Cătălina, six supply pits appear near the surface dwelling **L 1**. In our test-trench from Poiana Mănăstirii we did not find any supply pits, as well as in Albești. At Dobrovăț-Cetățuia, we documented two supply pits, with a very modest inventory. On the other hand, in the unfortified settlement from Dobrovăț – *La Livadă*, we were able to document six pits, some of them with a very rich inventory (pottery, remains from osseous materials, etc.).

Considering the size and shape, a certain variation is observed: thus, cylindrical, frustoconical, irregular shaped pits were documented.

Overall, the pits discovered inside the fortresses are not different from those found in the unfortified settlements. Moreover, in some hillforts such as Cotu – Copălău, their number and density seems reduced⁴²⁴, while in others (for ex. Stâncești) their density is greater.

⁴²³ See Berzovan, Borangic 2019.

⁴²⁴ With only three such features documented, see Șovan, Ignat 2005, p. 24–25.

VI.3. Cultic structures

Research to date has not revealed temples or sanctuary buildings. Even so, such structures were highlighted in the Prut-Dniester area, as for example we see the sanctuary from Butuceni⁴²⁵. Also, it cannot be excluded that in time, and in our area of interest, such special buildings might eventually be brought to light.

We will briefly discuss several features that could be related to cultic activities. Of particular interest is a sunken feature reported inside Fort 1 from Stâncești, situated in a relatively central position compared to the other traces of habitation. Unfortunately, the incomplete documentation, the absence of material analyzes on the bones, along with some confusing descriptions given by the authors of the excavation, do not permit a very accurate reconstruction.

The featured appeared at a depth of 1.90 m from the top soil. It is about a pit, in the shape of pear, with dimensions between 3.10×2.65 m and 1.70×0.95 , respectively. From a stratigraphic point of view, it belongs to the first stage of habitation. The shape of the pit is relative oval, with a maximum depth of 2.60 m, measured from the surface. The filling of the feature was slow. In the eastern part of the pit we noticed a spared threshold, at a depth of 2.60 m, on which the skeleton of a headless animal was laid.

In the deepest part of the pit, in the northern wall area, was deposited another headless animal. At approx. 0.5 m south of it, a human skull was found; face up, devoid of the lower and upper jaw. At a distance of 0.5 m south of it, three other distinct human skull caps were identified from three distinct individuals, located at a small distance from each other and apparently face down. In the central area of the pits, on a surface of 1.70×1.20 m, fragments of burned hearth with numerous traces of ash, charcoal and small animal bones were recorded. To the north of the hearth was found an oval grindstone, with a diameter of 0.45×0.30 m, and near it, a jar and a bowl, both of them hand-made. Unfortunately, the lack of analyzes on the osseous material, currently lost⁴²⁶, does not allow us to make developed assumptions. The sole study of the osteological analysis on animal bones found in Stâncești⁴²⁷ does not mention at all this feature. For example, the details are very interesting, like to see whether or not the four skulls show signs of violence or burning. All we know is that, according to the authors of the discovery, one of the skulls likely belonged to a teenager⁴²⁸.

The problem of the presence of human skulls and generally of human remains in non-funerary contexts was extensively discussed in the specialized literature⁴²⁹. For example, for the Early Iron Age, at the level of the East Carpathian Space, there are several discoveries of human skulls deposited in complexes located within settlements⁴³⁰. In the Late Iron Age, in the 5th–3rd centuries BC, situations similar to those in Stâncești are known in the Pruto-Dniestrian area at Saharna Mică or Trebujeni-Potârca⁴³¹.

Discoveries of this type, dated to the end of the Early Iron Age, are also known in the North-Pontic steppe and forest-steppe. For example, a jaw of a woman was discovered in a probably cultic complex located in the “Scythian” fort of Severynivka, Ukraine. Besides, a significant number of archaeological finds of human heads are known in the “Scythian” forest-steppe⁴³². As for the interpretation of skull depositions, they were related either to some peculiar funerary

⁴²⁵ Arnăut 2014, p. 84–85.

⁴²⁶ Florescu, Florescu 2005, p. 116.

⁴²⁷ Haimovici 1974.

⁴²⁸ This observation must be taken with a certain degree of caution, as the bones were not analysed by antropologists.

⁴²⁹ Sirbu 1993, p. 33, most recently Przybyła *et alii* 2010, p. 37–45, with examples from the Early Iron Age to Migration Period.

⁴³⁰ Niculiță *et alii* 2016a, p. 131–132.

⁴³¹ Niculiță *et alii*, 2014, p. 272–273.

⁴³² See discussion at Shelekhan *et alii* 2016a, p. 197–199.

practices, human sacrifices⁴³³, possibly an ancestral worship or a cult of the skull⁴³⁴. These were supposed by some authors to be also documented in the culture of the northern Thracian tribes and neighboring populations⁴³⁵.

Two possible cult pits were also reported in the hillfort of Fedești. **G1**, cylindrical in shape, with a diameter of 1.25 m and a depth of -0.55, with traces of fire, fragments of grinders, osseous remains and pottery. In the **G2** pit, located 1.5 m away, vessels were discovered (especially drinking vessels), fragmentary grinders and a Thracian-type brooch as well as other ceramic fragments.

The rarity of cult/ ritual features or constructions is, to a certain degree, offset by the presence – in the inventory of a large number of dwellings, of a significant number of anthropomorphic figurines, with traces of intentional damage (piercing, cuts, broken limbs), suspected of being used in various rituals of a magical nature (**Pl. 28/B**). Of particular interest is the “magic kit” discovered in the fortress of Bunești (**Pl. 28/A**).

⁴³³ Sirbu 1993, p. 33–34.

⁴³⁴ Sirbu 1993, p. 35.

⁴³⁵ Sanie 1999a, p. 118.

■ CHAPTER VII. CRAFTS AND OCCUPATIONS

VII.1. Food-producing occupations

VII.1.1. Agriculture

The specific occupation of sedentary populations, the agriculture has always played a key role in the economy of most civilizations. The area analyzed by us, as shown in the description of the geographical framework, offered favorable conditions for practicing of agriculture. In general, the western border of the Great Eurasian Steppe was covered by fertile chernozems. Ancient sources – including Herodotus – mentions the practice of agriculture by various sedentary populations living in or near “Scythia”.

Unfortunately, for this topic, we found out published a single palynological determination, made on a batch accidentally recovered from the hillfort of Bazga. Thus, in a fragmentary vessel was discovered a black lump containing 112 charred fruits of *Cannabis sativa* L. Hemp cultivation could be done both for the textile fibers that are removed from the stems, for the edible oil extracted from the fruit, but also for the oleoresins with hallucinogenic properties⁴³⁶. Discussing the costumes practiced by the populations living to the east of our area of interest in Scythia during the late 6th and 5th century BC. Herodotus mentions that the nomads living there used to make tents in which they put hot stones. On these hot stones, they threw hemp seeds, creating steam, which they used for bathing. Further, the “father of history” mentions the Scythians as “screaming in happiness”⁴³⁷; it is uncertain if this reaction was due to the psychoactive effects, since the seeds themselves contain rather small amounts of cannabinal. For the Thracian world such practices are not explicitly attested, but Herodotus mentioned them using hemp fiber in order to make clothing⁴³⁸. Remains of *Hordeum* (barley) and *Triticum aestivum* L (common wheat) were also recovered from another sample recovered from here⁴³⁹.

The scarce information provided by paleobotanical analyzes is supplemented by a few discoveries of agricultural tools and implements: sickles (Pl. 27/6–9), coulter, pruning knives (Pl. 27/10), etc.

VII.1.2. Animal husbandry

An important part for the economy and subsistence of ancient communities was animal husbandry. Unfortunately, for our area of interest there are not yet published large amount of data, but even in these conditions we can still make observations regarding the animals that were herded by the builders of the hillforts.

Thus, on the occasion of our excavations carried out in the fortress of Dobrovăț-Cetățuia (Iași County), we were able to recover from L1/2019 and L2/2021 a number of bone remains belonging

⁴³⁶ Monah 1988, p. 304.

⁴³⁷ Herodotus IV, 75 (after *Fontes* I, p. 43).

⁴³⁸ Herodotus IV, 74 (after *Fontes* I, p. 43).

⁴³⁹ Monah 1988, p. 304.

to domestic cattle (*Bos Taurus*)⁴⁴⁰. At Poiana Mănăstirii – *Între Șanțuri* and at Albești-Cetățuia hill-forts, surprisingly, no archaeozoological materials were recovered⁴⁴¹. Much more consistent batches were found during excavations in the hillforts from Stâncești and Cotu-Copălău and were analyzed by the archaeozoologist specialist Sergiu Haimovici⁴⁴². We will present and discuss the results in the followings.

Species	Fragments		Presumed Individuals	
	Absolute number	Percentage	Absolute number	Percentage
<i>Bos Taurus</i> (cattle)	314	72.35%	17	51.51%
<i>Sus domesticus</i> (domestic pig)	11	3.5%	3	9.09%
<i>Ovicaprinae</i> (sheep and goat)	9	2,07%	2	6.06%
<i>Equus caballus</i> (horse)	97	22.35%	9	27.27%
<i>Canis familiaris</i> (dog)	3	0.69%	2	6.06%
TOTAL	434		33	

Table 1. Osteological remains of domestic animals found in the hillfort of Cotu – Copălău (edited by A. Berzovan after Haimovici 2005).

From Cotu – Copălău 433 fragments were analyzed, belonging to approximately 33 individuals. The dominant species is by far the cattle (72.35%), followed by the horse; pigs, goats and sheep are in quite small number. It is interesting to note the high percentage of horse, 27.27% of estimated individuals, the largest percentage following cattle. Compared to hunting (see *below*, next subchapter), husbandry occupied a much more important role, the ratio being around 3.66 to 1 if calculated on the number of presumed individuals and 8.50 to 1 if calculated on total number of bone fragments.

Species	Fragments		Presumed Individuals	
	Absolute number	Percentage	Absolute number	Percentage
<i>Bos Taurus</i> (cattle)	4597	56.41%	268	45.42%
<i>Ovicaprinae</i> (sheep and goat)	1285	16.99%	125	21.18%
<i>Sus domesticus</i> (domestic pig)	1215	14.91%	116	19.67%
<i>Equus caballus</i> (horse)	892	10.95%	70	11.87%
<i>Canis familiaris</i> (dog)	61	0.74%	11	1.85%
TOTAL	8150		590	

Table 2. Osteological remains of domestic animals found in the hillfort of Stâncești (edited by A. Berzovan after Haimovici 1974).

⁴⁴⁰ Determination was made by our colleague, Bogdan Craiovan (West University of Timișoara) to whom we thank on this occasion.

⁴⁴¹ A fact that can be explained either due to the limited area of investigations, due to the acidic soils, or more likely, to the short timeframe occupation of the dwellings that we investigated.

⁴⁴² Haimovici 2005.

From Stâncești 8150 fragments were recovered, belonging to an estimated number of 590 individuals. Cattle dominate by far, representing almost half of the entire batch (45.42%). They are followed by sheep and goat (21.18%), pigs (19.67%) horses being present in a smaller percentage than at Cotu – Copălău, only 11.87%. Compared to hunting (see *below*, next subchapter), herding occupied a much more important role, the ratio being around 2.83 to 1 if calculated on number of presumed individuals, and 5.41 to 1 if calculated on total number of bone fragments.

The cattle found at Stâncești, as well as those from Cotu-Copălău had a gracile conformation and a low height, being very similar in shape to those from contemporary sites in Central Europe, and significantly smaller than the cattle attested in the North Pontic Steppes. This leads to the idea that the cattle used by the inhabitants of these forts were genetically unrelated to those of their eastern neighbors, the Scythians⁴⁴³. It remains unclear why the inhabitants of these forts apparently did not seek to improve the quality of livestock by crossbreeding their cattle with those of their eastern neighbors.

It is also interesting to note at Stâncești and Cotu-Copălău the scarcity of castrated males. Taking into account the sex ratio, as well as the age repartition of the individuals, it seems that the cattle, as well as the sheep and goats, were herded mainly for utilitarian purposes and only secondary as a food source⁴⁴⁴.

The pigs raised in the forts of Stâncești had a rather large size, greater than in other Late Iron Age settlements in the Carpatho-Danubian area. It is possible that this large size is due to the fact that the pigs were let to roam freely around the settlement, and thus sometimes crossbred with boars living in nearby woods⁴⁴⁵. The quite significant amount of pigs – 9.09% of total individuals at Cotu – Copălău and 19.67% at Stâncești indicate the importance of agriculture, as leftovers from agricultural products are one of the primary sources of food for pigs.

Sheep and goat also seem to play an important economic role. They offer meat for consumption as well as milk and derived products. Concerning horses, we have no data whether they had been used exclusively for traction, riding or as food, but their presence in significant number at Cotu – Copălău could be relevant in indicating a community more prone to mobility.

The comparison with some data coming from “Scythian hillforts” from the forest-steppe region of Ukraine can offer some interesting results; for example at Khotiv (Kyiv-Sviatoshyn Raion, Kyiv Oblast), horses dominate by far, followed by pigs (wild and domestic), cattle occupying a less important role⁴⁴⁶. These indicate a slightly different economic model, specific to an area dominated, at least politically, by mobile communities that depended on large number of horses, whereas the data from the East – Carpathian hillforts – especially at Stâncești hillfort – are indicative of a predominantly sedentary type husbandry, common to other regions from the northern Balkans and Central Europe.

VII.1.3. Hunting, fishing and foraging

Beyond procuring various types of goods, hunting had deep social and cultural functions. In archaic societies, an organized hunt resembles a military campaign, and there are many parallels between hunting and warfare, including some of the implements that are used: spears, lances, javelins, bows and arrows. There was often great respect shown to the hunted animals, especially to the large carnivores such as wolves and bears. In many past cultures, going to hunt was a first step in a young man's combat training⁴⁴⁷.

⁴⁴³ Haimovici 1974, p. 57.

⁴⁴⁴ Haimovici 1974, p. 57.

⁴⁴⁵ Haimovici 1974, p. 58. This type of pig farming is an economically viable strategy, still widely practiced today in Romania as well as in various other areas across the globe (see also Albarella *et alii* 2007, p. 285–287).

⁴⁴⁶ Покровска 1952, p. 18.

⁴⁴⁷ Cartmill 1996, p. 30.

Information about hunt preferences of the communities from Late Iron Age hillforts in the East Carpathian area comes from two archaeozoological analyses made by Sergiu Haimovici. He analyzed materials discovered at Cotu – Copălău and Stănțești hillforts. We will discuss them in the following.

Species	Fragments		Presumed individuals	
	Absolute number	Percentage	Absolute number	Percentage
<i>Cervus elaphus</i> (red deer)	38	74%	4	44.44%
<i>Sus scrofa ferus</i> (wild boar)	10	19.6%	2	22.22%
<i>Bos primigenius</i> (aurochs)	1	1.96%	1	11.11%
<i>Canis lupus</i> (wolf)	1	1.96%	1	11.11%
<i>Ursus arctos</i> (bear)	1	1.96%	1	11.11%
TOTAL	51		9	

Table 3. Bone remains of wild animals found in the fortress of Cotu – Copălău (edited by A. Berzovan after Haimovici 2005).

At Cotu-Copălău hillfort, the total number of samples is rather small. Most numerous fragments come from red deer, followed by boar. Aurochs, wolves and bears are represented by single fragments coming from a single individual. Due to the small amount of materials, it is difficult to enter into detailed discussions; the predominance of the boar and red deer might seem to indicate that hunting was done (mainly) for supplementing the food source. In any case, as indicated in previous sub-chapter, it played a secondary role compared to husbandry.

Species	Fragments		Presumed Individuals	
	Absolute number	Percentage	Absolute number	Percentage
<i>Sus scrofa ferus</i> (wild boar)	683	44.79%	74	35.58%
<i>Cervus elaphus</i> (red deer)	523	34.30%	63	30.29%
<i>Capreolus capreolus</i> (roe deer)	168	11.02%	29	13.95%
<i>Lepus europaeus</i> (rabbit)	57	3.74%	13	6.25%
<i>Canis lupus</i> (wolf)	32	2.10%	7	3.36%
<i>Vulpes vulpes</i> (fox)	20	1.31%	6	2.88%
<i>Ursus arctos</i> (bear)	19	1.25%	6	2.88%
<i>Bos primigenius</i> (aurochs)	16	1.05%	5	2.40%
<i>Castor fiber</i> (beaver)	4	0.26%	2	0.96%
<i>Melesmeles</i> (badger)	1	0.06%	1	0.48%

Species	Fragments		Presumed Individuals	
	Absolute number	Percentage	Absolute number	Percentage
<i>Martes martes</i> (pine marten)	1	0.06%	1	0.48%
<i>Felis lynx</i> (lynx)	1	0.06%	1	0.48%
TOTAL	1505		208	

Table 4. Bone remains of wild animals found in the fortresses of Stâncești (edited by A. Berzovan after Haimovici 1974).

At Stâncești, hunting played a less important role compared to husbandry, as shown in previous subchapter; however, the diversity of hunted species is significantly greater than at Cotu– Copălău hillfort. Boars dominate by far, followed by red deer and roe deer, animals hunted especially as food source. Another distinct category at Stâncești are the animals hunted (especially) for the pelts: beavers, badgers, pine martens and lynx. The pelts could be used in confection of various clothing and blankets. Due to the esthetic qualities, these could also have been used in trading. It is possible that some products of these animals (fat, fangs, claws, etc.) could have been used in folk medicine or other practices.

The larger variety of animals hunted in Stâncești compared to that of Cotu – Copălău fort, is a further confirmation of the importance of this hillfort as *regional economical center*.

It is interesting to note the presence of animals that are specific to large, deep forests: bears, boars, wolfs, lynx. These give precious data about the extension of the woods during the 5th–3rd centuries BC, which was in any case much larger than today. The beaver is also specific to a wet, forested environment.

VII.2. The pottery production

In this sub-chapter we will briefly discuss aspects related to material culture, and we will start with the most common category of artifacts encountered, the ceramic vessels. Given the main theme of this volume, we will not go into detailed aspects regarding the typology or functionality of the discovered vessels, making *only few general considerations*.

Regarding the *production of pottery*, we notice that no traces of ceramic kilns were identified inside the hillforts. This situation could be explained as a result of the state of research, considering that even in hillforts such as Stâncești, were not researched through extensive excavations, and only around 7–8% of the entire surface was excavated. On the other hand, it cannot be ruled out that the vessels were burned in pits or furnaces located at a certain distance outside the settlements, thus minimizing the risks of possible accidental fires.

Regarding the types of ceramic vessels, most fragments belong to *jar-type vessels* (Pl. 17). This type of vessels appears everywhere, in pits, dwellings, in cultural layer, etc. It has a simple morphology, with minor variations, continuing forms from the Early Iron Age. They are made exclusively by hand, having various amounts of sand in the fabric. The ornamentation is quite simple: the most common ornament is the alveolar girdle, applied to the neck or under the rim, sometimes associated with ovoid, flattened buttons used for holding the vessel. Simple girdles are also present. Most likely, this type of vessel was used for cooking and storing various types of food.

The *dishes* also continue in the same form from the Early Iron Age. Most of them have simple shapes, with a wide opening and a slightly tapered rim. Most of the vessels are handmade; predominantly reduced burns, the surfaces being slightly polished. There are also dishes with flared rim, as well as imitations of Greek ceramic forms – *lekanai*, the latter specific especially to the period after the 4th century BC. Ornamentation in general absent. The *bowls* have approximately

relative semicircular shape, with a straight rim or slightly tapered; most of them are handmade. Ornamentation is absent (see **Pl. 18, 19**).

Regarding *cups and mugs* (**Pl. 20**), these have various shapes: globular, frustoconical, with high neck, etc. Most of the pots are handmade; the fabric in general has small amounts of inclusions and has slight polishing. Ornamentation is rare.

In addition to these, as common forms, we mention a series of large vessels, from the category of *supply pots* (**Pl. 21, 22**). Some of them have large sizes. The fabric of some of the specimens is quite polished; this means that at least some of them were used to store liquids (water, wine, pickles, etc.). The ornamentation consists of alveolar or simple belts, associated with round or ovoid buttons; there are also other categories of ornaments such as belts arranged in a network, “commas”, etc.

A rather rare type of vessel, attested so far only at Stâncești hillfort, is the fruit-bowl (**Pl. 23**). During various scientific discussions, some colleagues expressed concerns whether this type of pot does really appear in archaeological contexts of the 5th–3rd century BC, since its specific for a much later timeframe, the 2nd century BC – 1st century AD period; furthermore, in early Late Iron Age sites from the lower Danube or from the Pruto-Dnistran interfluvium this shape is completely absent. What we can say is that at Stâncești hillfort, after carefully analyzing all the archaeological materials, we did not find any other materials that could indicate a later habitation layer from the 2nd century BC – 1st century AD. Furthermore, the fact that fruitbowls are documented as coming from well determined contexts (dwellings or pits), and the archaeological excavation was done quite cautiously, does not provide reasons to doubt the observations made by A. Florescu and M. Florescu, *at least for the moment*.

Hand-made vessels predominate, wheel-made pottery being rare. During the researches we coordinated in Dobrovăț hillfort, out of the few hundred fragments that we recovered, only two fragments were from vessels made on the wheel; a similar proportion was observed in the ceramic fragments discovered at Poiana Mănăstirii.

As it was pointed out, some of the ceramic shapes have their origin in the ones used by the cultures of the Early Iron Age. We notice that unlike the pottery from these earlier periods, the vessels found in the east Carpathian hillforts of the 5th–3rd centuries BC has few ornaments. The pattern register is modest and consists mainly of attached ornaments (girdles, buttons, and strings of alveoli) (**Pl. 24**). Incision is very rare (**Pl. 25/3**). This apparent lack of interest in the aesthetics of ceramic vessels is somewhat unexpected, in the context in which the technical and cultural achievements from this age are otherwise quite remarkable. Probably for the populations of the time, ceramic vessels were perceived strictly functional, being produced to serve only pragmatic purposes, artistic creativity being reserved for other types of materials. Considering the North-Thracian toreutics, illustrated in our area of interest by the hoard of Cucuteni – Băiceni, the tribes that built the fortresses to the east of the Carpathians certainly had artistic sensibility and subtlety.

Overall, the pottery found in the fortresses is no different from the one found in unfortified settlements or necropolises of the 5th–3rd centuries BC period from the lower Danube to the Stara Planina and the Dniester. The visible stylistic uniformity of pottery in such a large area raises multiple questions marks.

VII.3. Spinning and weaving

Spinning and weaving are two essential household crafts. These occupations could have been practiced by women and children, since these are activities that did not require consistent physical effort. Archaeological finds attesting the practice of these crafts inside the hillforts are quite numerous; they consist mainly of spindle whorls and the so-called “loom weights”.

The spindle whorls were mounted at the end of the spindle to help increase the speed. We do not exclude, of course, their occasional use as loom weights, when working with finer textiles. A large

number of this type of objects was discovered in some of the sites, for example inside the Stâncești hillfort. Needles, made either of bronze or bone are also attested in Stâncești hillfort.

VII.4. Other crafts

The construction of hillforts and of the dwellings found inside the enclosure requires significant amounts of wood. This implies the existence of a large number of people involved in the processing of lumber, or in tending certain woodland areas, requiring a proper set of tools / implements. The discovery of a large number of axes – of different types and sizes, confirms these assumptions (Pl. 26/1,2; 6–12). Of course, in addition to their role as tools, when needed, axes could also be used in combat, as a weapon.

The stone processing is attested by the existence of the wall from Cotnari-Cătălina hillfort, but also by the discovery of stone tools, such as grinders or creases. Axes, hammers or chisels could be used for the brief shaping of the blocks. It is interesting to note the discovery in the fortress of Dobrovăț of a hand hammer⁴⁴⁸, which leaves open the possibility that some poorer communities continued using stone tools in certain circumstances.

The existence of iron metallurgy is indisputable, no matter where the raw material was brought from. Some tools, such as the blacksmith's tongs discovered in the fortress of Bunești attest this (Pl. 26/5); in the same hillfort, the presence of slag was also mentioned. However, no workshops or ovens were documented or published so far.

The diverse number of bone tools discovered attests to the craft of bone processing; the large and relatively diverse number of hunted animals indirectly indicates the practice of skinning and fur processing.

VII.5. Jewelry production

Archaeological research determined the discovery of small chisels and clay crucibles in several fortifications, which indicates the practice of non-ferrous metallurgy. It is true that so far it was not possible to identify certain buildings that functioned as workshops, but this situation could be determined only by the current state of research.

Regarding the finished objects, we will make only a few general remarks, without detailing the discussion concerning the typology or chronology of objects (see Pl. 29, 33). It is remarkable the discovery of a large number of bracelets, made of iron (rare), bronze or silver, attested in several sites. Smaller bronze links, also found in several hillforts, may have been used as finger rings.

The presence of a large number of Thracian-type silver brooches – not only in the hillforts, but also in adjacent settlements and treasures – indicates the existence of one or more workshops⁴⁴⁹. Judging by the distribution area, it is possible that one workshop was located in the fortress of Bunești or in the surrounding areas.

⁴⁴⁸ Berzovan, Borangic 2019, p. 280.

⁴⁴⁹ For a more detailed discussion, see Măndescu 2004, p. 43; Spănu 2014, p. 76–78.

■ CHAPTER VIII. EXCHANGES

VIII.1. Trade and connectivity

VIII.1.1. Trade and connectivity with the Greek and Mediterranean world

The Greek colonization of the northern Black Sea began during the 7th century BC, but it is assumed that sailors coming from the Mediterranean were already crossing the waters of this sea since prehistory⁴⁵⁰. Phoenicians and Carians were, apparently, the earliest historical explorers⁴⁵¹, while the first Greeks, according to scholars, seem to have been the Euboeans⁴⁵². It is true that the literary and archaeological data for these early contacts is at this moment rather ambiguous, but the echoes of these ancient expeditions in uncharted waters, marked with all kinds of perils, have been preserved in the form of myths such as those about the island of Achilles, the exploits of Hercules in Scythia, the expedition of the Argonauts to Colchis, the fights against the Amazons and Centaurs and many others.

The establishment of the Greek colonies on the northwestern shores of the Black Sea marked the entry into history of these lands. The colonization represented a gradual process extended over a few centuries. Most of the Greek colonies proved durable, resisting in time until the Roman period. Histria was founded in the middle of the 7th century BC⁴⁵³; Tyras probably in the 6th century BC⁴⁵⁴; Nikonion in the second half of the 6th century BC⁴⁵⁵; Olbia in the second quarter of the 6th century BC⁴⁵⁶; Callatis at the end of the 5th century BC⁴⁵⁷.

The contact with the refined Greek civilization could not leave the locals indifferent. Equally, for the incoming southern merchants, the “wild” lands on the northwestern banks of the Black Sea offered a wealth of potential goods: slaves, salt, wheat, wood, honey, animal furs⁴⁵⁸, as well as good conditions for agriculture, much better than in the rocky and dry islands of the Aegean. Moreover, the Greeks soon realized that the locals “*were not ferocious barbarians, but fairly civilized people, who had a taste for the products of Asia Minor and were ready to trade*”⁴⁵⁹. It was of no surprise that during

⁴⁵⁰ Peev 2005, p. 217–222.

⁴⁵¹ Cojocaru 2004, p. 70.

⁴⁵² Alexandrescu 1990; Cojocaru 2004, p. 70.

⁴⁵³ Cojocaru 2004, p. 85–86 with bibliography.

⁴⁵⁴ See the discussion in Cojocaru 2004, p. 101.

⁴⁵⁵ Cojocaru 2004, p. 102–103. For a detailed bibliography on the finds of Nikonion and Tyras, see BCOSPE I 2014, p. 65–86; BCOSPE II 2018, p. 57–94; BCOSPE III 2019, p. 134–143.

⁴⁵⁶ Cojocaru 2004, p. 91.

⁴⁵⁷ For the founding of Callatis see Alexandru 2011, p. 85, with references to older bibliography.

⁴⁵⁸ For Scythia at least, some authors consider that slaves were the most sought-after commodity by the Greek merchants. According to N. Gavriljuk “*On the other hand, trade between Greeks and Scythians was undoubtedly of a large-scale character, as indicated by the discovery of large quantities of Greek products, even in remote part of Scythia. But since trade implies counter-goods of equivalent value, we may suppose that the most important exports from barbarian countries were energy resources in the form of slaves*” (Gavriljuk 2003, p. 77). For the problem of “Getae” slaves, see Hind 1994, p. 153–158; considering this information, it likely that one of the main products exchanged by the hillfort builders with the Greeks could have been slaves.

⁴⁵⁹ Rostovtzeff 1922, p. 61–62.

the 5th–3rd centuries BC, the Greek colonies were the main vector through which goods, ideas and concepts specific to the more developed Mediterranean world entered the world of sedentary and nomadic tribes living north of the Danube and east of the Carpathians. The increase of the power of the Bosphoran kingdom in Crimea, but also the consolidation of the Odrisian kingdom to the south of the Danube, followed by the rise of Macedon, further consolidated these tendencies.

The penetration of Greek goods starting in the 6th century BC in distant hillforts such as Stâncești and even further north and east⁴⁶⁰, to areas located many hundreds of kilometers away from the shores of the Black Sea and the colonies, raises a number of questions. Were these products brought by the Greeks themselves, or were they redistributed from one local community to another? Of course, we cannot give definite answers at this stage of the research and arguments could be given for or against each of these hypotheses. What is certain is that some categories of goods, such as amphorae, are quite difficult to handle and transport, implying the existence of more or less specialized groups (be it Greek, local, or mixed). These could have been brought on several routes, both on rivers (Prut, Siret) and on land. In this regard, the passage from the Histories of Herodotus in which we are told that the Prut River is known by the Scythians as *Porata* and by the Greeks as *Pyretus*⁴⁶¹ holds a certain significance. That the Greeks informing Herodotus had *a name of their own* for this river indicates a certain degree of familiarity with the local geography. The idea of Greek trading ships ascending the Danube and then on the lower reaches of its main tributaries can be seen as a plausible hypothesis, all the more so as the lower courses of the Prut and Siret did not have strong currents or cataracts.

The greatest part of the imports from the Greek world in the hillforts from the east Carpathian area of Romania seem to have consisted of perishable goods, such as wine. Numerous fragments of amphorae of various types, found in variable numbers in many of the sites, from the extreme north to the southernmost ones, bear witness to this⁴⁶². We will briefly present them in the following, and after we shall discuss other categories of materials.

VIII.1.1.2. Greek and Hellenistic Amphorae

Among the archeologically investigated hillforts, there is almost no site in which fragments of Greek amphorae have not been reported. However, we have to say from the onset that, at this moment, their number is not very large. If in the Prut-Dniester area, in the fortress of Butuceni for example, the Greek material represents almost 22% of the total pottery⁴⁶³, in the hillforts west of Prut analyzed by us the percentage is much lower, below 1–2% or even less. The preserved stamps are few, so the framing was often based on shards, some quite small, which did not allow the discussion of detailed typologies. Some of the determinations were taken from the literature, in other cases they were made by our colleague Dr. Honcu Ștefan (Iași Institute of Archaeology), whom we offer our thanks.

VIII.1.1.2.1. Amphorae from Aegean centers

A. Chios

The island of Chios was among the most famous wine-producing centers of Greek and Hellenistic times. In our area of interest, amphorae of this type appeared from the 6th–5th centuries BC until the beginning of the 3rd century BC⁴⁶⁴. Specimens with a swollen neck are specific for the earliest period; one such artefact was discovered in the fortress of Stâncești. Fragments of Chios amphorae were also

⁴⁶⁰ Greek amphorae had been entering at least as far north-east as the hillfort of Chotyniec (south-eastern extremity of Poland), see Czopek 2019; Trybala-Zawislak 2020.

⁴⁶¹ Histories, IV, 48 (after *Fontes I*).

⁴⁶² For a theoretical discussion on the limitations in interpreting the amphoristic material, see Vickers 2019.

⁴⁶³ Niculiță *et alii* 2002, p. 53.

⁴⁶⁴ Mateevici 2007, p. 34.

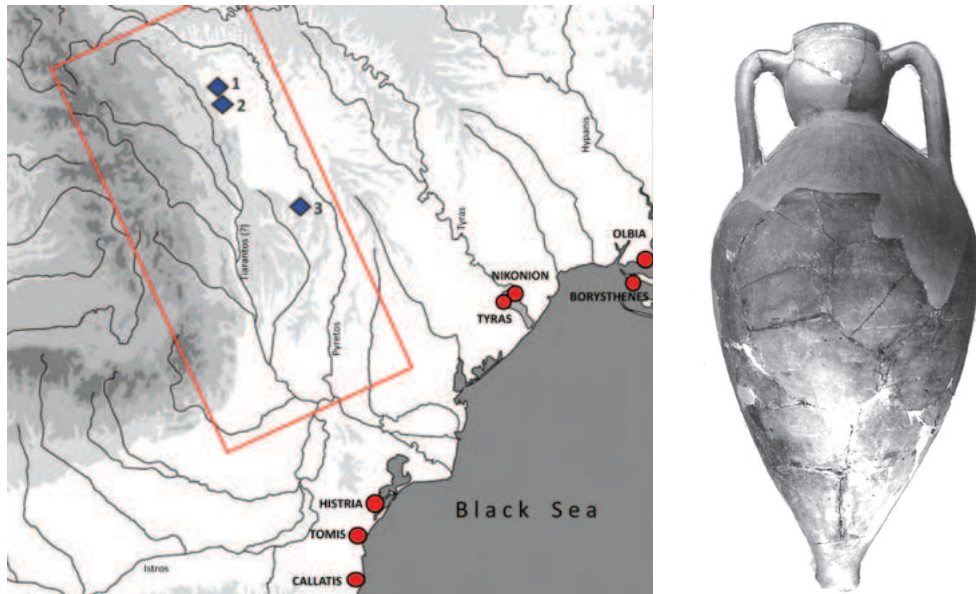


Figure 1. Left. Distribution of Chios amphorae in the hillforts from our area of interest: **1.** Stâncești; **2.** Cotu-Copălău; **3.** Poiana Mănăstirii; **Right.** Early Chios Amphora from Stâncești hillfort (after Florescu, Florescu 2005, fig. 94).

noticed in the hillfort of Cotu – Copălău⁴⁶⁵ and in the one from Poiana Mănăstirii⁴⁶⁶ (from the 4th century BC).

Their rarity can be explained not only as a result of the research stage, but also due to their price. It is important to consider the often quite prohibitive price of such containers. In Athens, for example, an amphora of Chios costed 100 drachmas, while the price of an ox was 60. Certainly here, outside the Mediterranean world, given the difficulties of transportation, the price would have been even higher and these items were not available to everyone⁴⁶⁷.

B. Kos

The island of Kos is located near Rhodes, near the western coast of Asia Minor. The wine produced here was considered generally to be of a lower quality compared to that of Rhodes, Thassos or Chios, being poorly represented in the northwestern Pontic area⁴⁶⁸, where they appear at the end of the 4th century BC. In our area of interest, fragments of Kos amphorae have been attested so far only in the Cotnari-Cătălina and Bunești hillforts⁴⁶⁹.

C. Knidos

Knidos was a Greek city on the southwest coast of Asia Minor in Caria. The climate favored the production of aromatic wines that were appreciated in ancient times. The amphorae from Knidos appeared in the northwestern part of the Black Sea during the second quarter of the 4th century BC⁴⁷⁰. In our area of interest, fragments from such an amphora were found in the Cotu – Copălău hillfort⁴⁷¹.

⁴⁶⁵ Șovan, Ignat 2005, p. 47.

⁴⁶⁶ Berzovan 2016, p. 220–221.

⁴⁶⁷ Mateevici 2007, p. 107.

⁴⁶⁸ Mateevici 2007, p. 31–32.

⁴⁶⁹ Sirbu 1983, p. 46.

⁴⁷⁰ Mateevici 2007, p. 30–31.

⁴⁷¹ Șovan, Ignat 2005, p. 47.

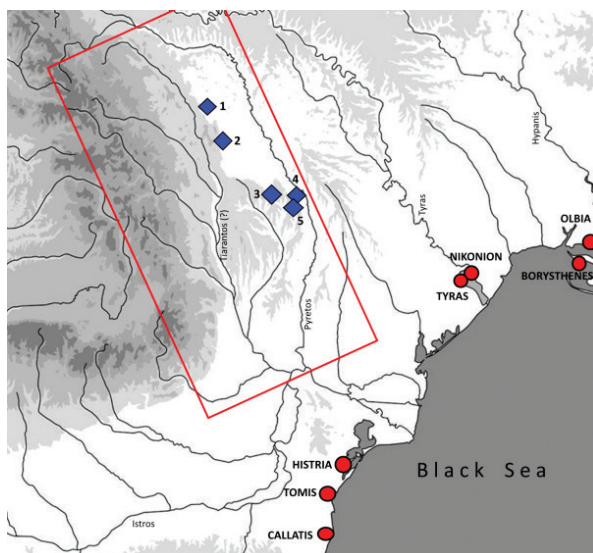


Figure 2. Distribution of Rhodian Amphorae in the hillforts from our area of interest.

1. Cotu – Copălău; 2. Cotnari-Cătălina; 3. Poiana Mănăstirii; 4. Moșna; 5. Arsura.

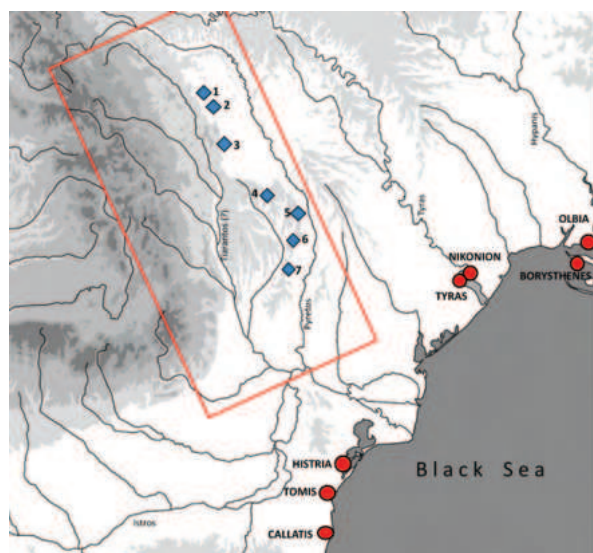


Figure 3. Distribution of the Thasos Amphorae in the hillforts from our area of interest: 1. Stâncești;

2. Cotu-Copălău; 3. Cotnari-Cătălina; 4. Poiana Mănăstirii; 5. Bunești; 6. Albești; 7. Fedești.

D. Rhodes

The island of Rhodes is located in the Aegean Sea, not far from the coast of Asia Minor. Due to its favourable position, it played an important economic, political and military role in the Greek and Hellenistic period. Rhodian amphorae have been entering the northwestern Pontic area at the end of the 4th century BC⁴⁷², being well attested. So far, they have been found in the hillforts of Arsura, Cotnari-Cătălina⁴⁷³, Cotu – Copălău⁴⁷⁴; Moșna and Poiana Mănăstirii⁴⁷⁵.

E. Thasos

Thasos island is located in the northern parts of the Aegean Sea, about 8 km from the coast of Thrace. The Thasos amphorae appear in the north-western Pontic Areas during the 5th century BC. Thasos is one of the best attested centers in the area between the Carpathians and the Bug River⁴⁷⁶. Thasos wine was considered to be of superior quality, appreciated by the aristocracy of sedentary populations living in the northwestern Pontic area⁴⁷⁷. Early variants of this product (5th century BC) are attested only at Stâncești hillfort. Later variants (4th–3rd centuries BC) appear in Albești⁴⁷⁸, Bunești, Cotnari-Cătălina, Cotu-Copălău⁴⁷⁹, Fedești and Poiana Mănăstirii⁴⁸⁰ hillforts.

F. Mende

Mende was an ancient Greek city located on the western coast of the Pallene peninsula in Chalkidiki, on the northern shores of the Aegean Sea, facing the coast of Pieria, near the modern town of Kallandra. Mende wine has been brought in the northwestern Black Sea area since the 5th century BC, but in small quantities, and it disappeared completely from the market in the last quarter of the 4th century BC. In our area of interest,

there is only one artefact of this type in the Cotu – Copălău hillfort⁴⁸¹.

⁴⁷² Mateevici 2007, p. 46.

⁴⁷³ Sirbu 1983, p. 48.

⁴⁷⁴ Șovan, Ignat 2005, p. 47.

⁴⁷⁵ Berzovan 2016, p. 220–221; Berzovan *et alii* 2020b, p. 47.

⁴⁷⁶ Mateevici 2007, p. 65.

⁴⁷⁷ Mateevici 2007, p. 117.

⁴⁷⁸ Fragment discovered during our researches carried out in 2021.

⁴⁷⁹ Șovan, Ignat 2005, p. 47.

⁴⁸⁰ Berzovan 2016, p. 220–221; Berzovan *et alii* 2020b, p. 46.

⁴⁸¹ Mateevici 2007, p. 88.

VIII.1.1.2.2. Amphorae from Pontic centers

A. Tauric Chersonesos

The ancient city, located in the southwestern part of the Crimean Peninsula, was founded in the 6th century BC by Greek settlers coming across the sea from Heraclea Pontica. The center began exporting wine to neighboring regions in the third quarter of the 4th century BC. Their number is not large. In the hillfort of Bunești, two complete amphorae were reported, one of them having a stamp with the name of the magistrate ΞΕΝΩΝ on the handle, indicating a date between the years 300–280 BC. Another such amphora was discovered in the Cotnari-Cătălina hillfort, dated between the end of the 4th – middle of the 3rd century BC⁴⁸².

B. Heraclea Pontica

Heraclea Pontica was an ancient city on the coast of Bithynia in Asia Minor, on the south-western shores of the Black Sea. It was founded by the Greek city state of Megara, around 560–558 BC. In the Eastern Carpathian area, this type of amphorae appears since the first quarter of the 4th century BC, being a well-represented one⁴⁸³. The large number of these amphorae is due, perhaps, to the rather low transport capacity of these containers, which ranged from 7 to 9 liters⁴⁸⁴. Their large number can also be explained by the fact that they mimicked quite well the shape of Thasos amphorae. In the context in which, as mentioned above, the wine from this Aegean center was very popular, the centers from Heraclea or Sinope copied the shape of the vessel. Heracleian amphorae were found at Bunești⁴⁸⁵, Cotnari-Cătălina, Cotu – Copălău⁴⁸⁶, Dobrovăț⁴⁸⁷, Fedești⁴⁸⁸, Poiana Mănăstirii⁴⁸⁹ and Stâncești hillforts.

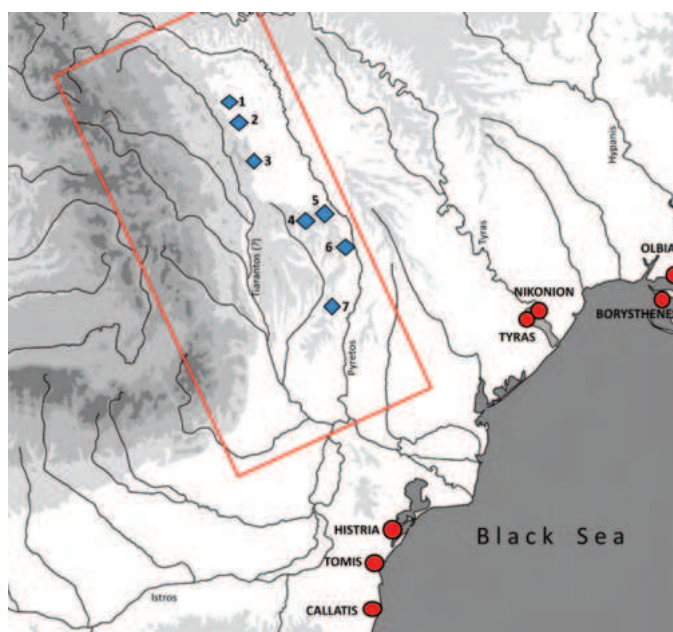


Figure 4. Distribution of Heracleian Amphorae in the hillforts from our area of interest. **1.** Stâncești; **2.** Cotu-Copălău; **3.** Cotnari-Cătălina; **4.** Poiana Mănăstirii; **5.** Dobrovăț; **6.** Bunești; **7.** Fedești.

C. Sinope

Sinope was an ancient Greek city founded in the 7th century BC by colonists coming from Miletus, on the southern shore of the Black Sea in ancient Paphlagonia. Between the 4th and 2nd centuries BC, the city became one of the major exporters of wine, olive oil and salted fish. In our

⁴⁸² Mateevici 2007, p. 91–92.

⁴⁸³ Mateevici 2007, p. 72.

⁴⁸⁴ See the discussions in Mateevici 2007, p. 40–41.

⁴⁸⁵ Bazarciuc 1983, p. 25.

⁴⁸⁶ Șovan, Ignat 2005, p. 47.

⁴⁸⁷ Unpublished, from old field surveys made by M. Tanasachi and V. Chirica in 1983 (collections of Iași Institute of Archaeology). During our archaeological campaigns in the hillfort from Cetățuia in 2019 and 2021, we found no fragments of Greek amphorae.

⁴⁸⁸ Sirbu 1983, p. 48.

⁴⁸⁹ Berzovan 2016, p. 220–221; Berzovan *et alii* 2020b, p. 47–48.

area of interest, fragments of Sinope amphorae had been found at Bunești, Cotu – Copălău⁴⁹⁰, Fedești⁴⁹¹ and Poiana Mănăstirii hillforts⁴⁹².

VIII.1.1.3. Other materials

In addition to amphorae – brought for their content – other ceramic vessels were also imported from the Greek world. The existence of fragments of luxury Greek pottery is reported in several of the researched sites. Unfortunately, this is often a fragmented vessel. In the hillfort of Cotu – Copălău, fragments of a *kantharos* with black furnish are attested, unfortunately too small to be able to frame them typologically precisely⁴⁹³. In Stâncești hillfort, several fragments from a *oneochoe* were reported; it is difficult to tell if we are dealing with the remains of an import or a well-made imitation. In Cotu – Copălău as well, brown fragments with furnish were reported, probably from *kantharoi*, and some other shards that could have come from a *kylix* and *lebes*⁴⁹⁴. In the hillfort of Cotnari-Cătălina we do not have attested so far luxury Greek pottery, but the presence of a local handmade imitation of *kantharos*, indicated that they probably existed. More numerous and representative are discoveries in the fortress of Bunești. Here was reported a *kantharos* with black furnish on the outside, decorated with palmettos, an *oneochoe*, *askos*, miniature amphorae and a Hellenistic plate with dark red firnis⁴⁹⁵. A fragmentary terracotta statuette (Tanagra?) was discovered in the Bunești hillfort. It is possible that an analysis of the entire material discovered at Bunești would bring to light more fragments of Greek ceramic vessels.

Overall, imports of luxury Greek pottery are surprisingly small compared to the much larger number of amphorae, a fact also observed for the Prut-Dniester area. This situation can have multiple explanations: it can be either a stage of research, but more likely it might reflect a lack of interest of the local population for this type of products. In general, the use of a certain type of pottery correlates with certain table, culinary or convivial traditions; even if the Greek or Hellenistic influence in the Eastern Carpathian space at the level of the 5th–3rd centuries BC cannot be neglected, it does not seem to have impacted strongly on the local society, which remained more or less “loyal” to its Iron Age heritage⁴⁹⁶.

Another category of artefacts imported (most likely) from the Greek world is *glass beads* (Pl. 29/4). There is almost no excavated archeological site or fortification from the period where they do not appear, regardless of whether they are single pieces or “strings”. The glass beads with “eyes” are also widely attested in the East-Carpathian area⁴⁹⁷ during the 5th–3rd centuries BC at Bunești⁴⁹⁸, Poiana Mănăstirii⁴⁹⁹, Stâncești⁵⁰⁰, Cotu-Copălău⁵⁰¹, Murgeni⁵⁰², Dobrovăț⁵⁰³ hillforts. Besides their unquestionable aesthetic aspects, these items could also have been cherished for their apotropaic role; such functions are demonstrated for the eye-beads found in the Pontic Greek area⁵⁰⁴, but also

⁴⁹⁰ Șovan, Ignat 2005, p. 47.

⁴⁹¹ Sirbu 1983, p. 48.

⁴⁹² Berzovan 2016, p. 220–221.

⁴⁹³ Șovan, Ignat 2005, p. 46–48.

⁴⁹⁴ Florescu, Florescu 2005, p. 93–94.

⁴⁹⁵ Bazarciuc 1980, p. 69, fig 10/1; Măndescu 2010, Cat. p. 38.

⁴⁹⁶ The situation is not unexpected. Equally rare is the presence of luxury Greek pottery in the intra-Carpathian area, at the level of the 3rd century BC. relatively few discoveries being known. It is assumed that these pieces were transported through the area of Moldova (Rustoiu 2011, p. 94). As one gets further and further away from the Greek Colonies, the quantity of Greek pottery in the local assemblages decreases exponentially.

⁴⁹⁷ Zanoci 1998, p. 88; Arnăut 2003, p. 136.

⁴⁹⁸ Bazarciuc 1979, p. 34.

⁴⁹⁹ Berzovan 2016, p. 220.

⁵⁰⁰ See the discussion in Berzovan 2018d, p. 232.

⁵⁰¹ Unpublished, in the collections of Botoșani County Museum.

⁵⁰² RAJ Vaslui 1980, p. 129.

⁵⁰³ RAJ Iași 1984, p. 126.

⁵⁰⁴ Dzneladze, Symonenko 2010, p. 204.

other zones⁵⁰⁵. Even in the present day, in Greece and Levant, very similar objects are used as protection against the “evil eye”⁵⁰⁶.

VIII.1.2. Trade and connectivity with the Eurasian Steppes

The problem of the relations existing between the builders of the hillforts and the world of the steppes is vast and complex. As we pointed out earlier in our work, we cannot speak of clear and well defined borders between the “Getae” and “Scythian” cultures, as there were areas of interference (such as the Bugeac or the Bărăgan). Moreover, we should not forget that before the hillfort horizon (5th–3rd century BC), at the level of the 7th–6th centuries BC, in the East Carpathian area, groups of populations with North-Pontic origins were also active. In these conditions it becomes obvious that direct contact with the “Scythians” (and other related groups) in this area lasted for at least four centuries (if not longer). And there are other arguments beyond the realm of archaeology that plead for intense contacts with the world of the Iranian nomads: a part of the river names mentioned by Herodotus and located roughly in the East Carpathian Area present plausible Iranic etymologies⁵⁰⁷.

It would be a mistake to assume that the relations between the locals and “Scythians” were reduced exclusively to military conflicts, of varying scale and intensity. But denying their existence would be equally wrong; for better or worse, these conflicts are attested in the few written sources available for our region and timeframe. Without entering too much on the realm of speculations, we might assume that, like in many other cases in history, relations between incoming nomads and sedentary populations could most likely have been of greater complexity, implying not just conflict, cooperation or commerce but also tributary systems, passage rights, trading rights, grazing rights, etc.

In almost all the hillforts that have been archeologically investigated or have benefited from more extensive field surveys, “Scythian” type bronze arrowheads have been reported, often in significant quantities. The presence of these artifacts in features (pits, houses)⁵⁰⁸, but also as in unfortified settlements or necropolises⁵⁰⁹, shows us beyond doubt that they were adopted and completely integrated in the “arsenal” of the local populations. Since bronze deposits are missing in the area between the Siret and the Dniester – the area of maximum concentration of hillforts – questions arise regarding the origin of the raw material for the realization of these weapons. Unfortunately, due to a lack of metallographic analyzes, no answer can be given at this moment.

Worth noting is that *so far*, no Scythian bronze-cauldron or akinakai had been found in any of the analyzed hillforts.

The hoard found in the Stâncești hillfort – of certain Scythian origin⁵¹⁰ – can be seen as a special case, but on the other hand the presence of harness pieces with analogies in the North Pontic space, as well as the fashion of horse ornamentation, suggested by some of the items from the Cucuteni – Băiceni hoard, indicate an ideology specific to the world of eastern nomads.

It would seem at first sight that the archaeologically detectable Scythian influence is visible especially in the equipment of horsemen and in the adoption of certain types of military equipment. Undoubtedly, the military ideology of the dreaded steppe warriors could not fail to leave its profound mark on the local horseman.

⁵⁰⁵ Perego 2010, p. 75.

⁵⁰⁶ Dundes 1992; Yoleri *et alii* 2006, p. 104–113.

⁵⁰⁷ For the few ancient sources, see the relevant discussions in the *Conclusions* of our volume.

⁵⁰⁸ Plenty of examples in Florescu, Florescu 2005.

⁵⁰⁹ Buzdugan 1968; Berzovan *et alii* 2020c.

⁵¹⁰ See also the discussion in *Chapter IX*.

VIII.1.3. Trade and connectivity with the Latene “Celtic” cultures

From 350 BC, Celtic groups entered and settled in the intra-Carpathian area, and at the beginning of the 3rd century BC, large swaths of territories in the northern Balkan region were overrun by Celts, generating in certain areas significant ethno-cultural and social changes. It is also admitted that the migration of the bearers of the Poieniști – Lucașeuca culture, from the last quarter of the 3rd century BC, which eventually lead to the end of the hillfort horizon in the East-Carpathian area, could have involved Celtic groups. In this context, contacts between the builders of the Eastern Carpathian fortresses and the Celtic groups could have lasted approx. 120–130 years.

The problem of Latene Celtic influence in the Carpatho-Danube area has been treated in a large number of specialized works⁵¹¹. The issue of Celtic influences and possible presences from the East Carpathian area was not neglected either⁵¹². It is interesting to note that in the hillforts located between the Carpathians and the Prut, Latene materials were found so far only at Bunești; for comparison, in the Prut-Dniester area, such vestiges were discovered in several fortifications⁵¹³.

As for the types of “Celtic” artifacts present, the brooches certainly predominate. Latene B2 (seven artefacts) and Latene C type (one artefacts) brooches were discovered in Bunești hillfort, indicating intensive contacts. To these we can add a set fragment from a Latene sword scabbard. Not coincidentally, in the same fortress, the decoration of one of the Thracian-type brooches discovered in *Treasure 1* bears striking resemblance to the decoration specific to some of the Dux-type brooches specific to the Latene B1 phase. This “hybrid” product (PL. 33/14) – a local form with specific Latene ornamentation – further illustrates the intensity of contacts with the “Celtic” world⁵¹⁴.

The discoveries are so far meager, but this situation reflects a simple stage of research, and it is likely that future investigations might change this preliminary picture. The iron bar deposits from Negri⁵¹⁵ (Bacău county) and Oniceni⁵¹⁶ (Neamț county) indicate the existence of some exchanges of raw materials; the distribution area of *Huși – Vovriești* coins, likely minted somewhere in the East Carpathian area from the middle of the 3rd century BC indicates contacts with the area west of the Carpathians, as far as the Scordiscian area⁵¹⁷.

VIII.1.4. Trade and connectivity with the northern areas

The issue of possible relations and connections of the East Carpathian hillfort cluster with the northern regions – not just Northern Bukovina, but also the Podolian and Volhynian regions – has generally received little attention. The connections between the bearers of the late and post-Chernoles culture and the local groups in the Carpatho-Dniester area are a subject that up to this moment was almost completely eluded by Romanian historiography and unfortunately hardly discussed by colleagues in Ukraine or Moldova⁵¹⁸.

⁵¹¹ We should add that the way this problem was (and still is) analyzed in Romanian archaeology differed from one historiographical period to another, in some moments being visible a tendency to minimize, in others on the contrary, to exaggerate the role and importance of these populations in the region.

⁵¹² Babeș 1985, p. 193; Teodor 1988, p. 33–51; Rustoiu 2020, p. 155–168. As certain discoveries such as those from Glăvănești de Jos (Iași county) or Horodiștea (Botoșani county) show us, for the area of the Jijia Plain and the north of Moldova, a Celtic penetration possible prior to the arrival of the Poieniști – Lucașeuca culture is, theoretically, possible (Măndescu 2010, p. 65–66). However, based on isolated and disparate discoveries, it is difficult at the moment to speak here of a Celtic horizon, and the above mentioned finds can be explained in other ways also.

⁵¹³ For example, Latene type phibulae were discovered in Mana III, Rudi – *La Șanțuri*, Saharna Mare, Saharna Mică and Stroiști hillforts (see Munteanu *et alii* 2020).

⁵¹⁴ Spănu 2013, p. 151–152.

⁵¹⁵ Rustoiu 2020, p. 158.

⁵¹⁶ Rustoiu 2020, p. 158.

⁵¹⁷ Rustoiu, Ferencz 2017, p. 350. See also the discussion at the end of this chapter.

⁵¹⁸ The situation can have multiple explanations, related mostly to the current stage of research. Starting joint Romanian-Ukrainian-Moldavian archaeological and research projects could bring to light necessary answers and solve at least some

For the Northern Bukovina area, the late Hallstattian cultural horizon (late Gava and Chernoles cultures) is overlapped starting from the late 8th century BC by the so-called West Podolian group, of steppic influence⁵¹⁹. But the chronological horizon between the latest manifestations of this group, dated to the 5th century BC and the appearance of the bearers of the Poieniști – Lucașeuca culture in late 3rd century BC – corresponding to the period of maximum flowering of the hillforts between the Carpathians and the Dniester – is at this moment very little known⁵²⁰.

In the hillfort of Stâncești, as well as in the one from Cotu – Copălău, handmade ceramic fragments were reported, decorated with an alveolar girdle doubled by a row of stitches⁵²¹. This type of ornamentation is specific to the Hallstatt cultures of the Ukrainian forest-steppe, corresponding to the late stage of the Chernoles culture and to the subsequent Western Podolian Group. This type of pottery appears as far north-east as Chotyniec hillfort in south-eastern Poland⁵²². The modest quality of these ceramic vessels makes the import hypothesis unlikely. It is interesting to note that ceramic vessel fragments of similar type are reported in a larger number of settlements from the east Carpathian area, reaching as far as the lower Danube area⁵²³, indicating the existence, at least during the 6th century BC, of a certain mobility in the forest-steppe communities, likely under Scythian impulse.

Can we talk about trade relations between the East-Carpathian hillfort builders and the bearers of the Poieniști – Lucașeuca culture, prior to their establishment in the East Carpathian area? It is true that in forts such as Moșna, Arsura or Poiana Mănăstirii we find Poieniști – Lucașeuca type pottery. But we must keep in mind that so far we are dealing with an archaeological material recovered either as a result of surface research or from the culture layer, thus we cannot know whether the artefacts reached those points in a time when the hillforts still functioned or if rather they belong to a small-scale Poieniști – Lucașeuca settlement built after the destruction or abandonment of the fortifications.

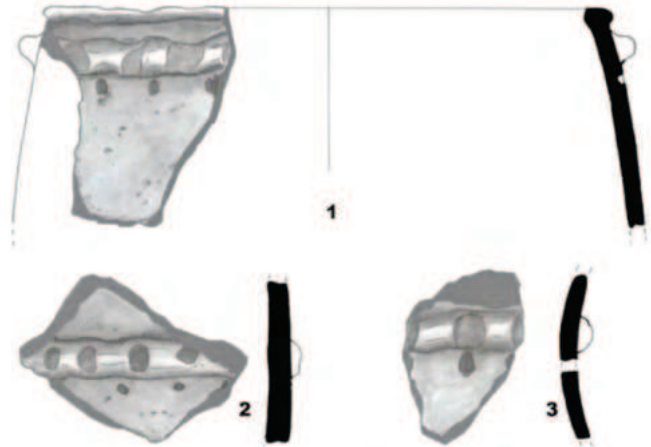


Figure 5. West-Podolian type pottery found in Stâncești hillfort.



Figure 6. Clay-spoons found in the Stâncești hillfort (after Florescu, Florescu 2005).

problems related to the history and prehistory of the Carpatho-Dniestrian space. Unfortunately, at the time of writing (March 2022), Ukraine is going through a most unfortunate political and military situation.

⁵¹⁹ For a more extensive discussion on the archaeological situation in this area, see Czopek 2020.

⁵²⁰ See the chronological table in Ільків 2020, p. 19.

⁵²¹ Berzovan 2018b.

⁵²² Czopek 2019 p. 132, p. 137.

⁵²³ Брумяко 2005, p. 151.

A special situation is raised by the burnt clay spoons, considered to be one of the artifacts specific to the Poienеști-Lucașeuca culture⁵²⁴. They were reported both in Arsura and at Stâncești hillforts (but without an archaeological context)⁵²⁵. If in Arsura there are other ceramic fragments belonging to this culture, for the time being in Stâncești, in all the materials analyzed until the date of writing these lines, we did not notice ceramic fragments of Poienеști-Lucașeuca type.

VIII.1.5. Long – range connections?

The presence of certain categories of artifacts – especially in the fortress of Bunești – raises the issue of long-distance commercial connections. The presence in the third hoard of Kauri shells – specific to the Indian Ocean – can have multiple explanations. They could have been brought over by Greek Merchants, but their coming via a North-Pontic route is also possible, since they were present since the early Scythian period⁵²⁶. The Scythians apparently adapted the usage of these shells from the Middle East, through Caucasian intermediaries⁵²⁷.

Of particular interest are the colored glass beads with human faces discovered in the hillfort of Bunești. It is considered that this type of items, well attested in the entire Mediterranean area, but also in the temperate Europe, have their ultimate origin in Phoenician and Carthaginian workshops⁵²⁸. For the 4th–3rd centuries BC it is difficult to imagine Phoenician traders entering in significant numbers in the northwestern regions of the Black Sea, thus we can assume that the artefacts were brought by Greek merchants and then spread from one “barbarian” group to another.



Figure 7. Glass-beads with human face from the Bunești hillfort.



Figure 8. Distribution of glass beads with human face in Central and South-Eastern Europe (edited after Karwowski 2005; Rustoiu 2011).

⁵²⁴ Michałowski 2004; Munteanu, Iarmulschi 2013.

⁵²⁵ Florescu, Florescu 2005, p. 93.

⁵²⁶ Bruyako 2007.

⁵²⁷ Bruyako 2007, p. 228–229.

⁵²⁸ Karwowski 2005, p. 169; see the discussion in Rustoiu 2011, p. 96–97.

In the third hoard in the hillfort of Bunești were found, among others, a necklace composed of 70 reddish coral branches and a necklace composed of 71 amber pieces and three beads made of glass paste. Unfortunately, we did not have access to the artifact and we cannot know whether we are dealing with coral from the Indian Ocean or with the more common *Corallium rubrum* from the Mediterranean Sea. Regarding the amber, there is no analysis to see its precise origin, but it could have been brought via the Amber Route from the Baltic, maybe through a Celtic intermediary⁵²⁹.

VIII.2. Did the builders of the hillforts mint coin? The Huși-Vovriești dilemma.

Did these communities produce their own local coinage? In the fortress of Bunești we know five coins of Huși-Vovriești type associated with a deposit of iron tools and a Thracian-type phibulae; seven additional isolated artefacts were found in the cultural layer⁵³⁰. If archeologists generally attribute these coins to the local population⁵³¹, numismatists generally tend to attribute them to Celts and Bastarnae⁵³². Judging by their distribution area – with most finds in the area of the Central Moldavian Plateau – but also their association with local artifacts that clearly indicate their dating during the 3rd century BC, as well as their absence from the Celtic or Bastarnae contexts, we consider at this moment the first hypothesis to be much more plausible. In any case, until new discoveries or studies are made, the issue remains open.

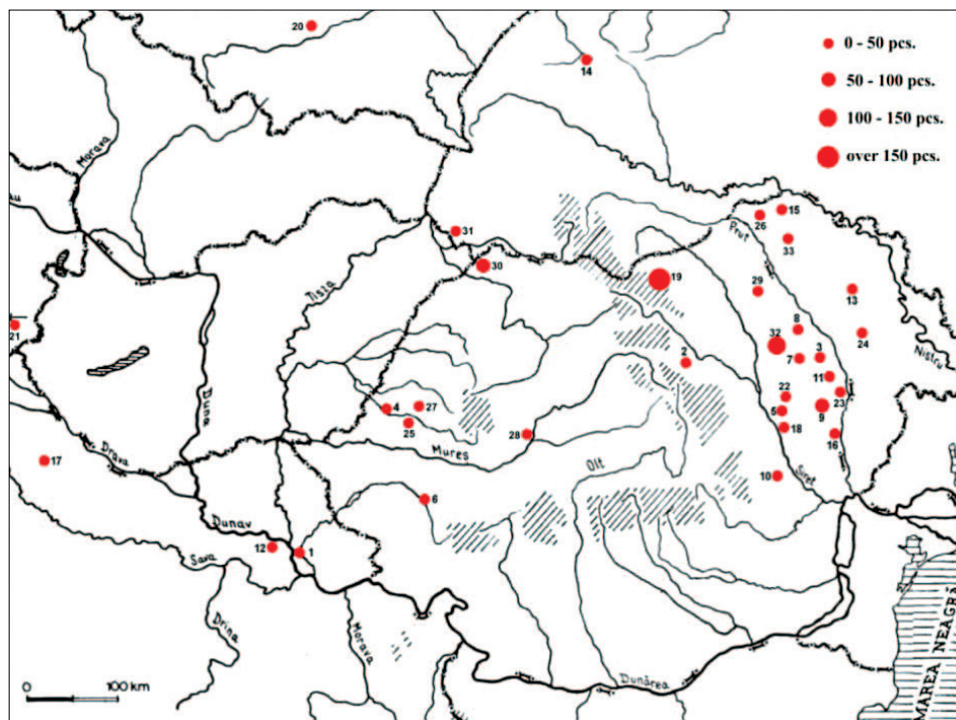


Figure 9. The area of distribution of the Huși – Vovriești type coins (after Munteanu, Chiriac 2016).

⁵²⁹ See the discussions in Rustoiu 2015.

⁵³⁰ Munteanu, Chiriac 2016, p. 563.

⁵³¹ Teodor 1999, p. 43; Măndescu 2010, p. 375; Rustoiu, Ferencz 2017, p. 351 and others.

⁵³² Mihăilescu – Bîrliba 1990, p. 71–74; see the detailed discussion at Munteanu, Chiriac 2016, p. 549–551.

■ CHAPTER IX. TREASURES AND HOARDS IN THE HILLFORTS

IX.1. A “Scythian” treasure outside “Scythia”. The hoard from Stâncești hillfort

The treasure was found inside a surface dwelling, namely dwelling no. 10, in Fort 2, trench L1, at a distance of approx. 122 meters south of the rampart. Like other surface dwellings found in the two fortresses, dwelling no. 10 was built on a wood frame, covered with clay. Rectangular in shape, it has dimensions of approx. 6×7 meters, and it is possible, according to the authors of the excavation, to have had two rooms⁵³³. The inventory, though not a rich one, is still representative. It consists of a several pottery fragments, an iron spearhead, two Scythian-type bronze arrows, and a fragment of a bronze bracelet⁵³⁴ (see **Pl. 30**).

The hoard was found stacked in a common clay pot that was deposited in a niche made under the floor of the dwelling. The treasure had eight artifacts: a zoomorphic applique made of gold, two smaller appliques, two other bronze appliques, two silver *psalia* made from bronze and silver alloy and an iron horse bit. We will describe the inventory.

The zoomorphic applique (**Pl. 31/1**) was neatly worked from a thin sheet of gold, probably by pressing it on a wooden pattern. It was used fixed on a support made of a more resistant material (wood?). The fixing of the molded gold sheet was made by folding it around the support. Regarding the animal represented, there are two opinions. One of them it considers that it represents a fabulous animal, with the head of a boar, the body of a fish and the tail of a bird. According to other opinions however, it represents just a peculiar type of fish⁵³⁵. As for the size of the object, these are the followings: total length 478 mm, maximum width in the center is 96 mm, the weight is approx. 100 grams⁵³⁶. Currently, the applique is in the collections of the National History Museum of Romania, Bucharest, with inventory number 1817.

The object until now was analyzed metallographic twice. The first was carried out by Axel Hartmann from Württembergisches Landesmuseum at Stuttgart and revealed a content of 59.3% gold, 40% silver, 0.70% copper and less than 0.01 bismuth traces⁵³⁷. The second one was done by Daniela Stan and Bogdan Constantinescu, with similar results: 60.9% gold, 37.6% silver, 0.2% copper and 0.2% iron in the area of the eye, respectively 58.4% gold, 39.1% silver, 0.2% copper and 0.5% iron in the area of the tail⁵³⁸. This type of alloy, known as electrum, with a very large amount of silver, is specific to the Caucasus Mountains and Eastern Anatolia⁵³⁹.

The two small golden appliques (**Pl. 31/2–3**) have an almost identical look, being most likely designed to be used as a pair. They have an interesting, ovoid-elongated shape with a small peduncle. Similar to the great applique, these artifacts were made by pressing a thin gold foil on a wooden frame, the fastening being done by bending. The surface of the appliques was decorated with regular,

⁵³³ Florescu, Florescu 2005, p. 55.

⁵³⁴ Florescu, Florescu 2005, p. 56.

⁵³⁵ Haimovici 1992, p. 180.

⁵³⁶ Florescu, Florescu 2005, pp. 70–71; Berzovan 2016a: 50–51.

⁵³⁷ See Hartmann 1978.

⁵³⁸ Stan, Constantinescu 2014, p. 674, Tab. 4.

⁵³⁹ Stan, Constantinescu 2014, p. 674.

approximately parallel grooves in the shape of a circular arc. The one completely preserved has 17 such semicircular grooves. As for the size of the artifacts, the preserved one has a length of approx. 174 mm and a maximum width of approx. 75 mm⁵⁴⁰. We can assume safely that the damaged one might have had a similar, if not identical size. A. Hartmann's metallographic analysis shows a content of 69.49%–64.49% gold, 30–35% silver, 0.51% copper and 0.01% bismuth. Analyzes conducted by D. Stan and B. Constantinescu reveal 60% gold, 38.3% silver, 0.3% copper and 0.5% iron in the base area, 59.8% gold, 38.4% silver, 0.3% copper and 0.5% iron in the peak area, indicating, as in the case of the great golden applique, also a Caucasian or Anatolian origin⁵⁴¹. The artifacts are currently at the National History Museum of Romania, Bucharest, with inventory number 1817.

The two bronze appliques (Pl. 31/4–5) are almost equal in size: 274 mm in length measured “on the string” and between 80 mm and 104 mm in width⁵⁴². They have a shape that is reminiscent of tusks or horns. The curvature of their lower, pointed part is oriented to the left, respectively to the right, indicating that they were most likely used in a pair. Regarding the clamping system, they present two parallel rows located on their top, consisting of seven holes each, at around 6 mm distance one from another. It is clear that the upper part of the two applications was fixed in this area on a support, while the lower, curved part remained free. The objects were ornamented by reproach, but their decoration is not entirely identical, leaving the impression of a rather negligent execution, in obvious contrast to that of the golden appliques. So far, no metallographic analysis of these artifacts has been carried out⁵⁴³. The objects are currently in the collections of Botosani County Museum.

The two silver bronze alloy *psalia* belong to the “S” shaped type, with two gripping holes. Both of them present at both ends zoomorphic protomes resembling birds of prey – probably vultures – strongly stylized. As far as the technique is concerned, they were made by pouring the molten metal into bivalve shapes, lacking any indications that these were later polished. In regard to their size, they have a total length of 120 mm and a diameter of 8 to 14 mm. There are no metallographic analyses of the artifacts. They remained in the administration of Botosani County Museum.

The iron horsebit was made up of two bars bent at both ends, one of which is deteriorated torn on its inside. Regarding the dimensions, it draws attention to the fact that the two bars have slightly uneven lengths, 52 mm and 60 mm respectively⁵⁴⁴.

In the followings we discuss the analogies for each artifact. The first object we're going to discuss is the great golden zoomorphic applique. Although we are dealing with a unique image, the individual elements that compose it have many analogies in the products of the Eurasian animal representation style.

The head of the Stâncești creature has very good analogies in the wild boar representations of the Scythian art: we mention the applique discovered in the necropolis of Nimphaeion (Crimea)⁵⁴⁵, in the inventory of Kurgan no. 4 of the “Seven brothers” mounds (Russian Federation)⁵⁴⁶, a stray find in the Taman peninsula (Russian Federation)⁵⁴⁷, another one discovered in the Kurgan no. 1 of Uliap⁵⁴⁸, etc. The resemblance between the head of the Stâncești animal and that of the boar heads depicted

⁵⁴⁰ Florescu, Florescu 2005, p. 71.

⁵⁴¹ Stan, Constantinescu 2014, p. 674, Tab. 4.

⁵⁴² Florescu, Florescu 2005, p. 72.

⁵⁴³ Berzovan 2016a, p. 51.

⁵⁴⁴ Florescu, Florescu 2005, p. 73.

⁵⁴⁵ Канторович 2015, p. 540, p. 1535.

⁵⁴⁶ Коровина 1957, p. 182, fig. 7/6.; Канторович 2015, p. 540, p. 1535.

⁵⁴⁷ Канторович 2015: 540, 1535.

⁵⁴⁸ Schlitz 1994, fig. 351.

on a golden vessel applique found in Baba (Lower Dnieper, Ukraine)⁵⁴⁹ is so obvious that the question arises whether or not we are dealing with the products made by same craftsman. In the light of these analogies, the interpretation suggested by S. Haimovici, according to which the creature represents just a peculiar kind of fish⁵⁵⁰, can no longer be supported.

Concerning the fish body, we identified several analogies. Fish-shaped appliques are well documented in the Scythian world: the golden fish-shaped piece discovered at Witaszkowo (Vettersfelde) on the modern territory of Poland⁵⁵¹, the applique found in the Volkovtzy tumulus (Ukraine)⁵⁵², the one of Ordzhonikidze (Ukraine)⁵⁵³. In the Thracian environment, we notice the golden fish appliques discovered in the tomb of Duvanlij – Kukova Mogila (Bulgaria)⁵⁵⁴, dated in the 5th century BC⁵⁵⁵. As for the identification of the fish species that was used as a source of inspiration for the body of the Stâncești animal, C. Michel speculates that it could have been a sturgeon⁵⁵⁶.

In terms of functionality, the zoomorphic applique from Stâncești was interpreted by numerous authors as a *prometopidia*⁵⁵⁷, and this opinion was apparently strengthened by the presence of other harness pieces within the hoard. The existence of a wood support and a number of relative analogies⁵⁵⁸ has been as many arguments in this regard. However, a closer look reveals the problematic nature of these interpretations that have neglected a *fundamental aspect*: the size of the object⁵⁵⁹. It was not taken into account that, from an artistic point of view, all *prometopidia* are symmetrically designed, in order to be viewed from the front and not from sideways, as in the case of our discussed artifact. So, we have to search for other functionalities for the Stâncești applique.

Possible clues would come from analyzing the existing analogies. For example, the fish-shaped gold artifact discovered at Witaszkowo (Vettersfelde), having 410 mm in length, 100 mm in width and a weight of 608.5 grams⁵⁶⁰, was interpreted as most likely a shield ornament.⁵⁶¹ For the pisciform decoration discovered at Ordzhonikidze such an interpretation is certain, as it was found attached to the shield blades⁵⁶².

At present we are considering the large golden zoomorphic applique as shield decoration to be the most plausible way of use⁵⁶³. Unlike the Ordzhonikidze artifact, decorating a metallic shield, the fabulous figure from Stâncești could have been placed, perhaps, on a wooden or wicker one.

⁵⁴⁹ Канторович 2015, p. 540, p. 1535.

⁵⁵⁰ Haimovici 1992, p. 180.

⁵⁵¹ Alexandrescu 1997, pp. 683–684; Nebelsick 2015, pp. 123–152.

⁵⁵² Илинская 1968, p. 124; Bukowski 1977, p. 141; Lebedynsky 2010, p. 258; Канторович 2015, p. 857–858.

⁵⁵³ Черненко 1968, рис. 57; Černenko 2006, taf. 38; Канторович 2015, p. 857–858.

⁵⁵⁴ Sirbu, Trohani 2007, p. 207.

⁵⁵⁵ Danov 1976, p. 146; Tonkova 2002, p. 277–279.

⁵⁵⁶ Michel 1995, pp. 35–47, p. 95, fig. 35, p. 62–68; Teleagă 2016, p. 243.

⁵⁵⁷ Gramatopol 1984, pp. 27–28; Kull 1997, p. 259; Măndescu 2010, p. 149; Florescu, Florescu 2005, p. 73; Trohani 2013, p. 67; Teleagă 2016, p. 216.

⁵⁵⁸ For example, the frontal applique of Solokha, which represents two fishes, having a length of 388 mm, being applied in its turn on wooden frame. (Jacobson 2005, p. 272).

⁵⁵⁹ In the Scythian world, *prometopidia* evolved from simple triangular ornaments of rather small size, to large artifacts, having up to 300–400 mm in length (Илинская 1968, p. 122). There are even larger ones, such as the applique found at Bolshaya Tsimbalka, with a length of 414 mm (Jacobson 2005, fig. 141–143), but all artifacts longer than 300 mm present a shape well adapted to the anatomy of a horse head (Berzovan 2016a, p. 51–52). If the golden applique of Stâncești would have been mounted on the forehead of a horse, as it is supposed by some authors, that particular horse was of completely unnatural size, even for today's standards. For a historical period, there are several studies with measurements made by archaeozoologists which show that horses had rather modest sizes (see for example Bököny 1974; Haimovici 1983; Haimovici, Tarcan-Hrișcu 1996). Despite these observations that we also published in several articles in previous years (Berzovan 2016a, Berzovan 2018c, Berzovan 2020), the idea that the large zoomorphic applique is a *prometopidia* continues to be accepted uncritically by a part of Romanian historiography and presented as such in popularization works or recent exhibitions.

⁵⁶⁰ Bukowski 1977, p. 134.

⁵⁶¹ Rieth 1971, p. 112; Bukowski 1977, p. 139–141.

⁵⁶² Черненко 1968, рис. 57; Černenko 2006, taf. 38.

⁵⁶³ For a longer discussion on the issue, see Berzovan 2016a.

As for the chronology of the object, corresponding clues are offered by the above-mentioned analogies. The tomb of Baba is dated from 470 to 450 BC, the one from Nimphaeion between 475–425 BC⁵⁶⁴, while the one from Ordzhonikidze is situated somewhere in the third or fourth quarter of the 5th century BC⁵⁶⁵. Considering the closest analogies, a dating close to the middle of the 5th century BC seems reasonable.

The two smaller golden applications have many analogies in a large number of funerary contexts in the North-Pontic Scythian world: the necropolis Nimphaeion (Crimea)⁵⁶⁶, the main tomb of Solokha kurgan (Ukraine)⁵⁶⁷, kurgan no. 5 of Berestniagi⁵⁶⁸, kurgan no. 14 of Rajgorod (Ukraine)⁵⁶⁹, Volkovtsy (Ukraine)⁵⁷⁰, kurgan no. 66 of Bobritza (Ukraine)⁵⁷¹, kurgan no. 459 of Turja (Ukraine)⁵⁷², and others⁵⁷³. Unlike most of these artifacts, the objects from Stâncești treasure, present a different gripping system.

It is not easy to decipher the nature of the ornamental motif that was rendered on these appliques: it seems to be a combination of an animal's ears or of a wing⁵⁷⁴. We cannot rule out an attempt to render a vegetal motif, maybe a leaf. The objects were used as side harness appliques. Their chronology covers the 5th–4th centuries BC period⁵⁷⁵, more probably only the first half of the latter⁵⁷⁶.

Regarding the situation of the two bronze appliques of Stâncești, their interpretation is much more problematic, primarily due to the lack of analogies⁵⁷⁷. Their rather rudimentary manner of realization compared to other objects from the treasure might suggest another origin, maybe local. Their interpretation as greaves, as found in some studies⁵⁷⁸, cannot be supported, given their shape and size. Quite tempting might be interpreting them as cheek-pieces of a helmet, but the gripping system, completely atypical, determined us to look with circumspection at such a hypothesis. In a recent study, Emilian Teleagă suggests that the two objects represent stylized horns of a mountain goat⁵⁷⁹, being part of an elaborate horse mask, with analogies both in the North-Pontic Scythian world as well as in the distant Pazyrik culture⁵⁸⁰. The hypothesis is very tempting, only that the two pieces, if they functioned as "horns" for the horse, should have been much better anchored than the perforations suggest. For us it seems that the two pieces rather represent "tusks", perhaps the ones of a boar – possibly in connection with the representation on the great golden applique. It is possible that these were mounted sideways on the horse head and fastened to the top, as shown by their gripping system, while their bottom part, "the tusks", remained free⁵⁸¹.

The two "S" shaped *psalia* with endings in the shape of bird of prey, have good analogies in similar finds from Kurgan 2 in Pesochinsk (Ukraine)⁵⁸² and in kurgan 24 of the Nimphaeion

⁵⁶⁴ Канторович 2015, p. 539.

⁵⁶⁵ Канторович 2015, p. 859.

⁵⁶⁶ Канторович 2015, p. 1199.

⁵⁶⁷ Канторович 2015, p. 576, p. 1200.

⁵⁶⁸ Петренко 1967, таб. 30/16.

⁵⁶⁹ Петренко 1967, таб. 30/17.

⁵⁷⁰ Ильинская 1968, Рис.34; Канторович 2015, p. 1200.

⁵⁷¹ Петренко 1967, таб. 30/15; Могилов 2008, p. 50; Канторович 2015, p. 1200.

⁵⁷² Петренко 1967, таб. 30/19,21;

⁵⁷³ For a longer discussion regarding these type of appliques, see Канторович 2015, p. 574–576.

⁵⁷⁴ Канторович 2015, p. 574–575.

⁵⁷⁵ Канторович 2015, p. 576.

⁵⁷⁶ Могилов 2008, p. 50–51.

⁵⁷⁷ In the dedicated monograph, an analogy is attempted between these two appliques and a series of horn-shaped *psalia* found at Kazbek, in the northern Caucasus (Florescu, Florescu 2005, p. 72). The analogy is unconvincing, the Kazbek artifacts do not resemble the Stâncești bronze appliques neither in their shape, neither in their size (Гертман 1972, Рис. 1).

⁵⁷⁸ Gramatopol 1984, p. 27–28; Sirbu, Florea 1997, p. 82; Zancu 1998, p. 84.

⁵⁷⁹ Teleagă 2016, p. 235.

⁵⁸⁰ Teleagă 2016, p. 250.

⁵⁸¹ Berzovan 2016a, p. 54.

⁵⁸² бабенко 2005, Рис. 4/5; Канторович 2015, p. 695.

necropolis (Crimea)⁵⁸³, both dated between 475–425 BC⁵⁸⁴. Of special interest is the discoveries from Pesochinsk, as the *psalia* is associated with a horsebit almost identical to the one found in the Stâncești hoard⁵⁸⁵. In the North-Thracian environment, a very similar *psalia* was found in the tomb 1 of tumulus 15 from Tigveni (Argeș County)⁵⁸⁶, dated in the first half of the 5th century BC⁵⁸⁷. Despite the enormous distance, we cannot ignore the analogies from the remote Pazyrik culture⁵⁸⁸. *Psalia* in the form of “S”, with zoomorphic terminals rendering animals other than birds of prey, are better represented in the North-Pontic steppes: kurgan 1 from Aksiotnitsy (Ukraine)⁵⁸⁹, kurgan 3 of Stebliv (Ukraine)⁵⁹⁰, kurgan 522 of Smila (Ukraine)⁵⁹¹.

As far as the iron horsebit, it raises far fewer problems compared to the other discussed artefacts, representing a simple, common type. Another artifact of the same type was also discovered in Stâncești, in Fort 2⁵⁹². Similar discoveries are known from the Cotnari-*Cătălina* hillfort⁵⁹³, and from Găvani (Brăila County)⁵⁹⁴. Such kind of horsebits have a widespread spread in the North-Pontic Scythian environment: Kelermes – Kurgans no. 3 and 4 (Ukraine)⁵⁹⁵, Aksiotnitsy – Kurgan no. 4⁵⁹⁶ and Kurgan no. 440⁵⁹⁷, etc. They also appear in the Ciumbrud group – for example, in grave no. 9 of Cristești (Romania)⁵⁹⁸. Their chronology seems to be a broad one, covering the 5th and the 4th centuries BC.

In the light of this discussion, a dating of the Stâncești hoard in the middle of the 5th century BC seems quite plausible. If we take into account the good analogies in the necropolis at Nimphaeion, we could further refine its chronology to the third quarter of the 5th century BC. We cannot give an absolute answer concerning the extent of these dates and how much it covers the precise moment when the treasure was buried.

The symbolism of the great golden application remains equally difficult to decipher. We could look at the Thracian art, especially at the one produced in the “Getae” culture. The wild boar head could be interpreted as a symbol of the earth; the body of fish, water; the bird tail – the air, the heavens⁵⁹⁹. Such associations – bird, fish, boar (or rabbit) are quite common in “Thraco-Getic” art, finding expressive illustrations on the famous Detroit helmet, on the one of Peretu, on the goblets of New York Metropolitan Museum and Agighiol (Tulcea County) and also in the Rogozen treasure (Bulgaria)⁶⁰⁰. It is believed that this scene could represent in an allegorical manner, the supreme divinity, the one ruling over all three realms⁶⁰¹. In this case, the zoomorphic applique – as interpreted by us as a shield ornament – could have had strong apotropaic purposes.

⁵⁸³ Канторович 2015, p. 695.

⁵⁸⁴ Канторович 2015, p. 695.

⁵⁸⁵ бабенко 2005, Рис. 4/2;

⁵⁸⁶ Popescu, Vulpe 1982, Fig. 18/f.

⁵⁸⁷ Măndescu 2010, p. 163.

⁵⁸⁸ Руденко 1953, таб. XLIV/4; таб. LVI/3; таб. LXIV/6.

⁵⁸⁹ Могилов 2008, p. 206 and Рис. 197/11.

⁵⁹⁰ Могилов 2008, p. 206 and Рис. 195/12.

⁵⁹¹ Могилов 2008, p. 206 and Рис. 195/10.

⁵⁹² Florescu, Florescu 2005, p. 76.

⁵⁹³ Florescu, Florescu 2005, p. 76.

⁵⁹⁴ Florescu, Florescu 2005, p. 76; Harțuche 1985, fig. 24.

⁵⁹⁵ Могилов 2008, p. 204 and Рис. 185/13.

⁵⁹⁶ Могилов 2008, p. 204 and Рис. 186/10.

⁵⁹⁷ Могилов 2008, p. 204 and Рис. 186/5.

⁵⁹⁸ Vasiliev 1980, pl. 16/13.

⁵⁹⁹ Crișan 1986, p. 358.

⁶⁰⁰ See Sîrbu, Trohani 2007.

⁶⁰¹ Crișan 1986, p. 358–359.

The image of the bird of prey with the fish in the claw seems to be a frequent iconographic motif in the North-Pontic environment. We find it on an appliqué from the Maikop hoard (Russian Federation)⁶⁰², but also on some coins issued by the Greek colony of Histria, where the fish is no longer a fish but a dolphin⁶⁰³.

An overlook in the mythology and beliefs of ancient Iranian is likely to give us several variants of interpretation. The boar is a remarkable through its ferocity. In *Zend Avesta*, the wild boar is often associated with Verethragna, the god of victory, therefore, an animal with certain martial connotations⁶⁰⁴. The presence of this symbol on objects could therefore indicate that they belonged to an individual with a high social status in the military hierarchy of nomadic Iranian groups⁶⁰⁵. Also, if the interpretation that we gave to the two bronze applications as “tusks” is real, then their purpose could have been to symbolically transfer the ferocious characteristics of the boar to the horse of the chieftain who once owned it. Also, the heads of birds of prey – probably eagles – show a certain fascination with rapacious beasts – rapacity, ferocity, represented traits or “qualities” necessary for survival in the harsh world of the steppe warriors that lived almost two and a half millennia ago.

IX.2. The hoards and deposits from the Bunești hillfort

Several treasures and deposits discovered in this hillfort are discussed in the literature. Unfortunately, the discussions are plagued by a number of question marks regarding the real context of the discovery of the artifacts, as long as there are not published detailed situation plans and the author of the diggings at Bunești, V. Bazarciuc, presented in a few cases contradicting information from one study to another.

The *first hoard* (Pl. 33) consists of silver earrings and ornaments probably deposited in a vessel: 14 Thracian-type brooches with thickened bows, 15 rings and loops, three bracelets, one of which spiral with snake-shaped heads, a bronze spiral bracelet and a silver coin from the Greek colony of Histria⁶⁰⁶.

The *second hoard* (Pl. 29/1) was discovered during 1981 campaign, according to the author, in house no. 21. It consists of two Thracian type silver brooches and two silver spiral bracelets⁶⁰⁷.

The *third hoard* was allegedly found in the western corner of dwelling 32 in 1982 campaign, deposited in a mug covered with an iron axe. It consists of ornaments: a 75-bead necklace (71 made of amber, three made of greenish eyed glass paste and one made of yellow glass paste), a necklace of 70 reddish coral branches, two gold-leaf bitronconic pearls and two spiral bracelets, silver with snake-shaped ends, two Kauri shells and a bronze ring⁶⁰⁸.

There were found also four deposits of artifacts. The *first deposit* was discovered in the 1980 campaign, at the NW end of the S 16, at a depth of -0.35–0.40 m. The inventory has an iron ax with a transversal fastening hole, an iron axe with side wings, an iron ax with an open socket, an iron mandrel, a silver brooch of the Thracian type and five silver coins of the Huși – Vovriești type⁶⁰⁹.

The *second deposit* was discovered in trench S 23, close to house 19. It consists of two axes with open socket, two axes with transversal fastening hole and an iron plow coulter⁶¹⁰.

⁶⁰² Nebelsick 2012, p. 462.

⁶⁰³ Sirbu, Trohani 2007, p. 210.

⁶⁰⁴ See the discussion in Вертиенко 2014 and Вертиенко 2014a.

⁶⁰⁵ Вертиенко 2014a.

⁶⁰⁶ Bazarciuc 1980a, p. 168–171; Bazarciuc 1981, p. 563; for a synthesis on all the published data, see Măndescu 2010, *Anexe*, p. 36.

⁶⁰⁷ Bazarciuc 1983, p. 262, 266; see also Măndescu 2010, Cat., p. 36.

⁶⁰⁸ Bazarciuc 1984, p. 172; see Măndescu 2010, Cat., p. 36.

⁶⁰⁹ Bazarciuc 1983, p. 252; Bazarciuc 1983a, p. 211; Măndescu 2010, Cat., p. 36; Munteanu, Chiriac 2016, p. 563.

⁶¹⁰ Bazarciuc 1983a, p. 212; Bazarciuc 1983, p. 253; Măndescu 2010, Cat., p. 36.

The *third deposit* appeared in 1983, being discovered in dwelling L 32. It consists of nine iron axes (four with open socket and five with transverse hole), two iron spear heels connected with two iron links provided with a rivet⁶¹¹. *Deposit four* was discovered in dwelling 32 and consisted on cultic pieces deposited in a bell-shaped jar: six anthropomorphic clay figurines, a clay “rattle”, a miniature vessel and another two conical pieces made of clay⁶¹².

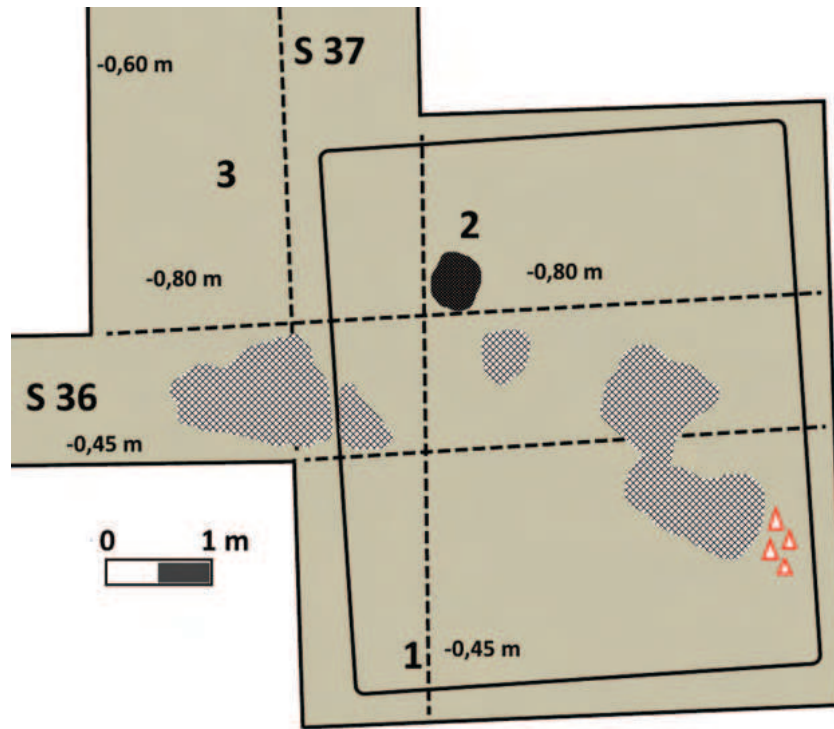


Figure 1. Bunești hillfort; intersection of S 36 and S 37 with plan of the area of dwelling no. 32 (after Arnăuț 2014). Legend is incomplete. **1.** Deposit no. 4; **2.** Deposit no. 3; **3.** Hoard no. 3.

The interpretation of these hoards and deposits raises several issues. From the point of view of inventories, we observe deposits composed exclusively of ornaments (**hoard 1, 2**), of iron tools and ornaments (**hoard 3**), only of iron tools (**deposit no. 2**), of iron tools and weapons (**deposit no. 3**), of iron tools, ornaments and coins (**deposit no. 1**). To these is added the **deposit no. 4** which presents pieces generally associated with magical and witchcraft practices. It is remarkable that at least three of these deposits (**hoard 3, deposits 3 and 4**) were discovered near the same dwelling L 32.

Their heterogeneous character, the lack of special arrangements (only pits or shallow pits are indicated as context) show us that it is *unlikely that these are ritual deposits*. Most likely, we are dealing with objects hidden by the inhabitants of the hillfort, in a certain threatening politico-military context. That these objects have been preserved as such in the ground – not being recovered by those who buried them or by any attackers, gives certain clues about the fate of the community that built the fortress from Bunești which could have been either driven away or annihilated sometime at the beginning of the last quarter of the 3rd century BC.

IX.3. The golden diadem from Bunești hillfort

The diadem was found in the northern part of the hillfort, on the edge of trench S 57, where traces of habitation from the Eneolithic (Cucuteni culture) were found. It was deposited in a small

⁶¹¹ Bazarciuc 1987, p. 35, fig. 3; Măndescu 2010, Cat., p. 36.

⁶¹² Bazarciuc 1987, p. 34.

pit, directly on an Eneolithic platform, in an area apparently devoid of Late Iron Age finds⁶¹³. We do not have at our disposal any published plan with the object, but some archive photos published by Doina Harnagea in a local newspaper from Vaslui County⁶¹⁴ capture the moment of its discovery in the trench section, at a rather shallow depth. There are some contradictions between the published data and those that we find in the testimony of the participant in the discovery, and this is the reason for which is good to maintain certain precautions, until the full publication of the excavation diary and plans of excavation.⁶¹⁵

No.	Analyzed areas.	Au%	Ag%	Cu%	Fe%
1	Flower ornament	92.9	5.3	0.9	0.6
2	Head of spirals (marked with blue)	97.5	0.7	0.6	0.8
3	Spire 2 (upper); near the ornament	93.6	4.8	0.5	0.7
4	Spire 2 (lower); head	97.3	0.8	0.8	0.7
5	The stitch of the flower (right)	85.6	11.4	1.7	0.8
6	The stitch of the flower (left)	90.9	7.3	0.7	0.7
7	Area of the head marked with blue	98.1	0.7	0.3	0.8

Table 1. Results of the metal graphical analysis on the diadem (after Stan, Constantinescu 2014).

As for the object origin (**Pl. 34**), it raises few issues, which make it difficult to support, at least in our opinion, the idea of a unique provenance. It is not the place here for a detailed debate on the diadem, which would go far beyond the scope of this book, but we wanted to discuss few findings. It is beyond doubt that diadems have their origin in the Greek and Hellenistic world; rosettes as well as the use of the filigree technique also indicate, without a doubt, the cultural fingerprint of the same world. On the other hand, the technique of making the heads – in the form of predators – brings us closer to the models discovered in the “barbarian” space of the northwestern Pontic area (Lărguța)⁶¹⁶, suggesting that we are in front of a synthetic Graeco-Barbarian product. We can also take into account the hypothesis that the jewelry could have been produced by an itinerant craftsman from the northern cities of the Black Sea or commanded from the same space.

⁶¹³ Bazarciuc 1984, p. 172.

⁶¹⁴ <https://www.vremea.ro/>.

⁶¹⁵ The article from the newspaper mentions that the diadem was hidden under the floor of a Late Iron Age dwelling, contrary to the data from the study where it is said that it appeared isolated from the vestiges belonging to this era. If in the published study the traces of the cut are seen as an indication of an attempted intentional destruction in Antiquity (Bazarciuc 1984, p. 173), in the participant's statement it is implied that the deformation and the cuts were made during the extraction (performed quite carelessly by schoolchildren).

⁶¹⁶ Măndescu 2010, p. 95.

■ CONCLUSIONS

Due to LiDAR technology and related field surveys, it was possible to outline, delimit and map the early Late Iron Age hillforts located between the Carpathian Mountains and the Prut River. However, as we said in the introduction, this enterprise is still a long way from being completed. Future field research and archeological excavations will certainly bring into discussion not only new sites, but also additions or corrections to the preliminary data provided by us in this volume.

During our researches, many questions arise to which, at this stage of the knowledge, we can offer only partial answers, more or less anchored in the data provided by the excavations, and the few and often confuse ancient historical sources.

What was the functionality of these hillforts? As we presented throughout the volume, the visible typological diversity seems to indicate a certain functional variety. Sites such as Bunești, Stâncești and Cotnari– *Cătălina* functioned as residential centers and focal points that exercised a certain degree of control over the communities living in their hinterland. Through its surface and massive military architecture, the *Cătălina* hillfort impresses even today. Massive amounts of manpower and resources were invested in the building of these fortifications; and for *Cătălina*, the stone architecture further emphasize its distinct role.

On the other hand, hillforts such as Dobrovăț–*Cetățuia* seem to have functioned rather as a refuge for local communities, in a micro-zone where the center of gravity was located, apparently, in the lowland unfortified settlements. True “eagle nests”, the hillforts from Ibănești or Scobinți–*Dealul lui Vodă* likely played a predominantly military role, while enclosures such as those from Victoria – *Șanțul Caterinei*, or Scobinți–*Grădiștea*, due to their position and shape, could have served as a shelter for herds roaming in the Jijia Plains, or used for other purposes. The fact that both of them enclose springs might not be accidental.

We may say that beyond their strict functionalities (military, political, ceremonial), the hillforts represent the emanation of a plethora of different communities, with different economic, political and social potentialities. At this moment there are no arguments to consider the hillfort phenomenon we analyzed as “proto-urban”.

How long did hillforts last? Sites such as Stâncești, Cotnari–*Cătălina* or Cotu-Copălău, certainly covered a longer timeframe, having a multigenerational existence. For Stâncești at least, there are solid archaeological arguments to suppose a functioning period of around two and a half centuries, maybe even more. The Bunești hillfort, where multiple hoards and deposits were found, seems to have existed only during the 4th–3rd centuries BC. Other sites, such as Albești, seem to be occupied for a short time. Future excavations, a more in-depth analysis of the recovered materials existing in various museum archives, as well as usage of absolute dating methods, will undoubtedly bring more information and provide in time a more accurate image. In any case, based on the data we have so far, we can say that after early beginnings in the late 6th and 5th century BC, the maximum flourishing period of the hillfort phenomenon between the Eastern Carpathians and the Prut River was between the 4th and 3rd centuries BC.

What were the causes that led to the emergence of these hillforts? The question becomes even more pressing if we look at the larger situation between the Eastern Carpathians and the Dniester River, where, as we have already pointed out, there are about 130 hillforts dated roughly between

5th–3rd centuries BC, forming one of the largest such hillfort clusters in this timeframe in Temperate Europe. In our opinion, at the roots of this phenomenon lay *multiple causes* and we discuss them in the following.

During the 7th–6th centuries BC, the East Carpathian regions were crossed by various groups of mobile populations, pouring in from the eastern steppes of nowadays Ukraine⁶¹⁷. These groups, that undoubtedly exercised a form of control over the settled populations that they encountered, apparently had no interest in creating fixed centers of power. Real or a figment of imagination, the reply given by Scythian king Idanthyrsus to Darius the Great, retained in the writings of Herodotus, is more than eloquent: “*For we Scythians have no towns or planted lands, that we might meet you the sooner in battle, fearing lest the one be taken or the other be wasted*”.

Apparently hillfort building – in this timeframe and part of Europe – did not occur in the areas firmly controlled by nomadic groups, but in *border regions*. The hillforts of Iron Age Ukraine that appear as early as the 8th or 7th century BC, were built at the border between the steppe and forest steppe area, where the proper “Scythian” world, with its distinct values and lifestyle, entered in contact with the world of the forest-dwelling sedentary agricultural populations. Built either by “Scythians” themselves to control their remote northern subjects, or rather by locals, for defense against nomadic raids, these massive fortifications, that required significant amounts of resources and manpower, are ultimately the result of this cultural collision⁶¹⁸.

Returning to our study area, it may not be a coincidence that hillfort building begins at a large scale only after the 5th century BC, exactly at the time when the influence of the nomads in the area to the east of the Carpathians diminishes drastically in favor of the local groups, and the Carpatho-Dniestrian region changes from an area dominated by roaming nomads into a *border* region. Defending against incoming raids and the need to control certain routes and crossings must have given the local communities the impulse to develop necessary social and political framework in order to be able to engage in massive collective efforts such as hillfort building. Seen in this light, the large clustering of fortifications, visible on the western banks of Dniester River, no longer appears unusual.

But to further understand the East-Carpathian hillfort phenomenon, we might have to take a look beyond strictly political and military causes. There were other changes happening on the north-western shores of the Black Sea starting since the 7th century BC: the coming of the Greeks and the founding of their colonies⁶¹⁹. This brought the locals into contact with the more advanced and refined civilizations of the Mediterranean area⁶²⁰. The Greeks did not teach the locals how to build ramparts, palisades and ditches, but they opened trade routes and by doing so, offered to the various local factions, wide possibilities for economic development. This phenomenon happened in time, as the amount of trading relations continued to increase, especially after the 5th century BC onwards. Trade routes had to be guarded, goods stockpiled, gathered or redistributed further on, and forts likely played an important role in these activities. Participations of locals as soldiers of fortune or mercenaries, either in the colonies or in Greece itself, also played its role.

⁶¹⁷ Ionomu 1996, p. 21–56; Ignat 2000, p. 331–344; Ignat 2004, p. 5–12; Ignat 2006; Berzovan 2016b, p. 139–162.

⁶¹⁸ As a historical parallel, an interesting comparison can be made with the situation from the 9th–12th centuries AD, when in the contact area between the steppe and the forest-steppe, the sedentary East-Slavic populations built a large number of fortifications, hillforts and dykes, from western Ukraine to the east of the Dnieper, mainly as a defense against the devastating raids of Turkic nomads. The efforts were massive, comparable in magnitude to those of the builders of the Iron Age Bielsk mega-hillfort; the so-called “Serpents Wall”, built according to some opinions in the 10th–11th centuries, had a total length of over 1000 km (Kyчepa 2005). The situation will be repeated a few centuries later, when in order to defend against the constant Crimean Tatar slave raids, the Muscovy Principality built impressive lines of defense in the East-European forest-steppe.

⁶¹⁹ Haheu 2014.

⁶²⁰ A good measure of the massive impact the Greek goods had on local population is shown by their presence in funerary assemblages all across the Carpatho-Danubian area in the early Late Iron Age (Teleagă 2008).

Furthermore, one of the commodities much sought after by Greek merchants were slaves; since most of these were captives taken during raids, this must have brought a significant increase in low level military conflicts between various competing groups.

There were other processes developing in this timeframe. From *at least* the 5th century onwards, we can see an obvious convergence at the level of material and spiritual culture between the East-Carpathian regions and those from the Lower Danube⁶²¹. The common pottery from nowadays Dobrudja or northern Bulgaria is almost undistinguishable from the one we find in hillforts such as Stâncești or Ibănești. As we mentioned in other occasions in this book, this material and spiritual convergence does not indicate a single political entity, not even a single “ethnicity” inhabiting this vast area. It also indicates clearly the existence of a connected environment, rallied around a specific set of social, cultural and spiritual values. We may add that such a “uniformization” in a short historical time could not have been possible without the spread of a common language – a *lingua franca* – to facilitate it. Such a convergence – from the fringes of the Moldavian Plateau and the Dniester to the northern slopes of the Stara Planina – further facilitated the spread of ideological influences coming from the Persian Empire, the Odrisians, Macedon and later Hellenistic kingdoms, that, in a certain sense, lead to the transformation of our area of interest into a “Barbarian” periphery of the “civilized world”.

The ceremonial golden helmet from Cucuteni –Băiceni, with its analogies in the Lower Danube area, or the golden diadem from Bunești – a mixed product of Greek and Barbarian art – are more than proves for the adoption of “southern models” by the elites living between the East – Carpathians and Prut River. The same taste for opulence and power can explain the construction of fortifications with a monumental aspect such as those from Cotnari, or tumuli with inner stone structures such as those from Cucuteni.

Last, but not least, there might have been another discrete factor at play in the hillfort phenomenon: the climate. It is true that there are available relatively limited data for this timeframe, but according to existing data between the 5th–3rd centuries BC, the East-Carpathian area was more humid than today⁶²². Fewer droughts combined with the widespread fertile chernozems guaranteed significant yields of grain and other cereals. This might have contributed to economic growth and generation of surplus and demographic increase. The large number of hillforts and settlements known for this timeframe, significantly more numerous than in earlier periods, are more than relevant in this direction.

What was the name of the people who built these hillforts? If from an archaeological point of view, the unity in material and spiritual culture of the local culture visible in the area between the Balkans, the Danube and the Dniester at the level of the 5th–3rd centuries BC allows to speak of a *Getic culture* – in a strict archaeological sense – we cannot but wonder to what extent those who built the hillforts of Cotnari or Stâncești, in the northern parts of the Moldavian Plateau, bore the same tribal name as the populations living near the mouths of the Danube and nowadays northern Bulgaria.

We pointed out on several occasions during this volume that these remote regions certainly were not part of a single large political unity, so we can assume that just as the lower Danube factions

⁶²¹ Some authors have attempted to explain this process as occurring due to a “Getic” migration from nowadays Dobrudja and the Lower Danube into the Carpatho-Dniestrian area (Tkaciuc 1994; Ткачук 1999, p. 274–304; Levinschi 2005 and others), see also the discussions and criticisms in Haheu 2019, p. 21–26, especially in Haheu 2010. We do not wish to comment too much on this hypothesis; we only add that for the regions located west of the Prut River such a scenario cannot be supported in the light of existing archaeological data. The *earliest dated hillforts* appear in the northernmost extremities (Stâncești) of the region and not in the areas closer to the Danube, as one would expect in the case of a gradual migration coming from the south.

⁶²² Gerasimenko *et alii* 2018, p. 10. See discussions in *Chapter I* of our volume.

bore the name *Getae* (apparently not an exonym) the groups from the East Carpathian area also had a tribal or regional name of their own, certainly known to the Greeks whose goods reached such a large number of hillforts and settlements in the area. Is there a chance that this name was retained in the written sources of Antiquity that have come down to us, or are we dealing with yet another enigma, forever lost in the mists of history? Given the paucity of written sources, their ambiguous nature and the specific problems they raise, the larger discussion we propose in the following cannot be but *purely hypothetical and should be viewed as such*.

Any analysis has to start with the *Histories* of Herodotus of Halicarnassus (484–425 BC), in which we have the first descriptions of the lands located on the northern and north-western shores of Pontus Euxinus. The episode of the subjugation of the Getae by Darius the Great of Persia, on the occasion of his expedition against Scythia, has been widely discussed in historiography and there is no doubt that the confrontation between the Achaemenid army and the said northern Thracian tribe took place somewhere south of the Danube and north of the Balkan Mountains, most likely in nowadays Dobrogea. Therefore, in order to find out more, we have to consult the passages dedicated to the geography of the lands north of the Danube. Here is what we are told in Book IV,48: *“The Ister, the greatest of all rivers known to, flows with ever the same volume in summer and winter; it is the farthest westward of all the Scythian rivers, and the reason of its greatness is as follows: many other rivers are its tributaries, but these are those that make it great, five flowing through the Scythian country: the river called by Scythians Porata and by Greeks Pyretus, and besides this the Tiarantus, the Ararus, the Naparis, and the Ordessus. The first-named of these rivers is a great stream flowing eastwards and uniting its waters with the Ister, the second, the Tiarantus, is more to the west and smaller; the Ararus, Naparis, and Ordessus flow between these two and pour their waters into the Ister.”*

It is clear from the text that the rivers mentioned flow through “Scythian lands”; for Herodotus, everything north and north-east of the Danube was “Scythia”. If so, we must accept that for Herodotus the western boundary of Scythia, where it bordered the “land of the Agathyrsoi” must have been further west. The identification of the river *Porata* / *Pyretus* with today’s Prut does not raise problems; things are, however, completely different with regard to the other rivers mentioned. If *Tiarantus* corresponded to today’s Siret (Hierassus in later sources), it would mean that there were three distinct rivers between it and the Prut that flowed into the Danube, which is completely implausible from a geographical point of view, even if we accept that before the Medieval Period, the Bârlad River flowed directly into the Danube⁶²³. Of course, various historiographical explanations and identifications have been tried over time⁶²⁴, but the most likely explanation is that there was an error made by the “father of history”.

Regarding the etymology of the river names, the name *Porata* is clearly Iranian⁶²⁵. Regarding *Naparis*, according to O. N. Trubachev, in the names with *-nap* we might recognise an Iranian root **nap*, meaning “lesser”, “junior”, thus *Naparis* could be interpreted as the “lesser Aris”⁶²⁶. There are also other possible explanations⁶²⁷. *Ararus* does have some interesting analogies in ancient Gaul – *Araris* and *Arauris*, suggesting a very old origin, possibly pre-Indo-European. For *Tiarantus* itself there are multiple possible explanations, the Iranian origin being by far the most plausible.

Continuing with the Herodotian text, the information regarding the courses of the Dniester (Tyras) and Bug (Hypanis) rivers becomes much more detailed. Thus... *“The next is the Tyras; this comes from the north, flowing at first out of a great lake, which is the boundary between the Scythian*

⁶²³ Croitoru 2021, p. 185–187.

⁶²⁴ For example, Vulpe 1986, p. 33–43; Sirbu 1987, p. 425–429; more recently Dan 2011, p. 52–53; Teleagă 2014, p. 299.

⁶²⁵ Pârvan 1923, p. 9–10.

⁶²⁶ Трубачев 1984, p. 151.

⁶²⁷ For other opinions, see Pârvan 1923, p. 22–23. We might add that a Pre-Indo-European origin is equally plausible, cf. Kartvelian ნაპირი [napiri], “river shore”, “embankment” (Apridonidze *et alii* 2006, p. 1035). For a larger discussion about the possible linguistic connections between the ancient Carpatho-Danubian lands and the South Caucasian area, see our study, Berzovan 2020a.

and the Neurian countries; at the mouth of the river there is a settlement of Greeks, who are called Tyritae. The third river is the Hypanis; this comes from Scythia, flowing out of a great lake, round which wild white horses graze. This lake is truly called the mother of the Hypanis. Here, then, the Hypanis rises; for five days' journey its waters are shallow and still sweet; after that for four days' journey seaward it is wondrous bitter, for a spring issues into it which is so bitter that although its volume is small its admixture taints the Hypanis, one of the few great rivers of the world. This spring is on the borderland between the farming Scythians and the Alazones; the name of it and of the country whence it flows is in Scythian Exampaeus, in the Greek Tongue Sacred Ways. The Tyras and the Hypanis draw their courses near together in the Alazones' country; after that they flow divergent, widening the space between."

Since the Bug River and the Dniester River "approach" only in the area of their middle courses, we can assume that the mentioned Alazones⁶²⁸ had their dwellings somewhere around the Vinnitsa Oblast in nowadays Ukraine. We will not insist more on the text of Herodotus; however, it is clear that if the information on "proper" Scythia and the area of the Danube mouths is relatively accurate, the data on the area between the Eastern Carpathians and the Dniester are vague, proof that the ethnic, demographic and political situation in the area was *unknown to him*⁶²⁹.

In the light of these data, the hypotheses circulated by some colleagues from the Republic of Moldova regarding the possible development of Darius' the Great expedition mainly in the Prut-Dniester area⁶³⁰ must be rejected, as there are no solid historical or archaeological arguments to sustain it. So, if the Herodotian text did not prove useful in establishing the name of the people who built the hillforts from the East Carpathian area, are there other ancient sources to help us in this regard?

Attempts by some researchers to solve this riddle by using later antique historiographical sources are generally unconvincing⁶³¹. Strabo, Ptolemy, Pliny the Elder and others offer us in their works glimpses of an *ethnically and demographically changed* East Carpathian space from the 1st century BC– 1st century AD period, when the Dacian kingdom flourished. The data they offer are very precious, *but cannot be extrapolated* for the situation in the 5th–3rd centuries BC.

And yet, a possible solution might come from such a later author, Pomponius Mela, who lived in the first century AD. In his *Chorographia*, when describing the lands of Scythia, Mela does not use contemporary sources, but follows closely the Herodotian tradition – anachronistically, of course – mentioning the same Callipidae, Agathyrsi, Neuri, etc. But if Herodotus does not tell us exactly who lived west of the Dniester, Mela tells us (§ 2.7): "*The Tyra separates the people here from the Istrians. That river rises among the Neuri, and where it makes its outlet to the sea, it runs beside a town of the same name*".

It is quite clear that we are not dealing with the inhabitants of the Greek colony Histria, whose territory never extended to the Dniester, nor with the Veneto-Illyrian "Istrians" from the north-western tip of the Balkan Peninsula (mentioned by Mela at § 2.57), nor with the "Istrians" / "Taurians" of southern and eastern Crimeea. Are we dealing with a mistake or confusion, or there is more to these mysterious *Istrians*?

⁶²⁸ According to some authors, Herodotus' ethnic can be explained "as a western Iranian name to be translated by the Latin *alienigenae*" (see Dan 2013, p. 56).

⁶²⁹ Teleagă 2014, p. 299.

⁶³⁰ For example, Kaşuba 2010, p. 487. In a study entitled *The Archaeological Landscape of the Republic of Moldova* written by A. Levinschi (<https://culturalheritage.acad.md/?p=391>, accessed on 10.06.2021) reference is made to a so-called clay tablet with "Persian cuneiform" writing allegedly discovered at Corneşti, Ungheni district, used as a proof for the Persian penetration in the Pruto-Dniestrian area. The primary source for the "tablet" is the article of Ion Dron (Dron 2006). Without entering into further comments, we can say that the author of this *pathetic forgery* did not even bother to study the Persian cuneiform writing (easily accessible, easy to learn) preferring instead to draw random nonsense signs. Such gross falsifications should not be invoked in scientific research, nor should they be present on sites promoting the archaeological heritage.

⁶³¹ Attempts had been made to identify the hillfort builders with the historical Tyragetae (Ursulescu 2017; Ursulescu 2017a), but these are mentioned in much later historical sources.

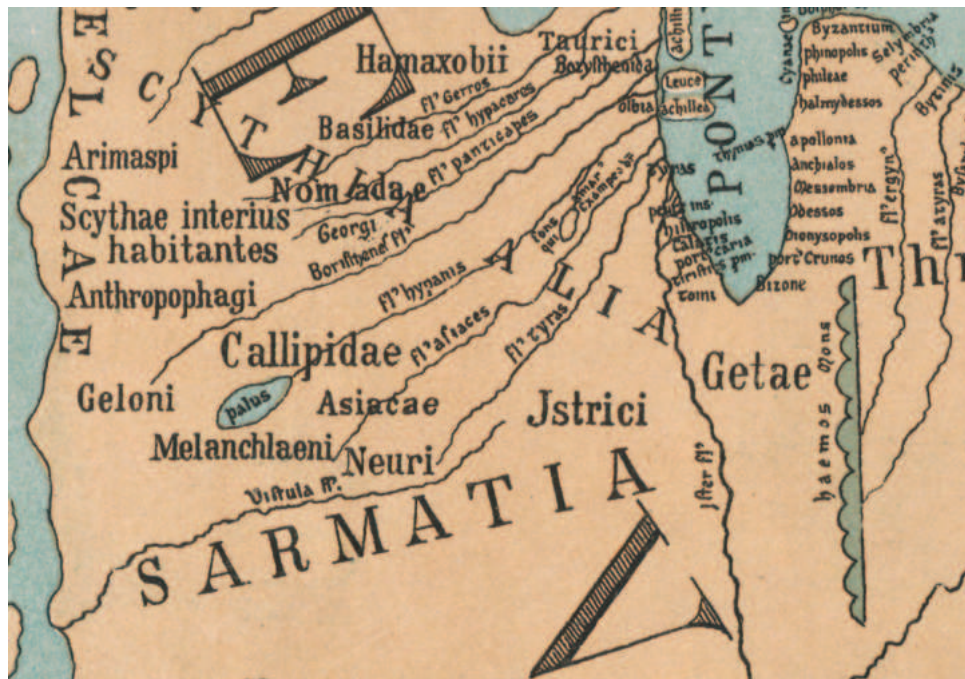


Figure 1. Fragment of the reconstruction of the world according to Pomponius Mela, made by Konrad Miller (1898). One can see the “Jstrici” positioned to the west of Tyras and to the north of the Danube and the Getae.

In order to find an answer, we will look at the data provided by the Gallo-Roman historian Gnaeus Pompeius Trogus in his *Philippic History*, which, unfortunately, has reached us only in the form of the *Epitomes* made by Marcus Junianus Justinus. Thus, in Book IX,2 we learn that: “*The king of the Scythians at that time was Atheas, who, being distressed by a war with the Istrians, sought aid from Philip through the people of Apollonia, on the understanding that he would adopt him for his successor on the throne of Scythia. But in the meantime, the king of the Istrians died, and relieved the Scythians both from the fear of war and the want of assistance*”.

The passage provoked certain discussions in Romanian historiography⁶³² and in that of other neighboring states⁶³³. Most of the authors who interpreted the passage seem to agree with one thing – that the term “Istrians” could not refer to the inhabitants of the Histria colony, which was never ruled by a king and which, in any case, could not mobilize enough forces to oppose the army of the Scythian king Ateas. As we learn, when Phillip eventually defeated Ateas, he allegedly took 20,000 war prisoners. Even if the real number of prisoners was half the size, or even a tenth, it still speaks about the military capacity of Ateas who had an army *in the thousands, if not tens of thousands* of combatants. Whoever was the forgotten “king of the Istrians” that opposed and created problems for the elder Scythian king, he must have mustered an army of comparable size and must have stood directly in its way⁶³⁴. During this period, in the 4th century BC, a significant number of hillforts functioned in the Carpatho-Dniester area, witnessing not only large-scale collective efforts, but also

⁶³² See Nistorescu 2010 with references to previous bibliography and points of view. A prudent opinion at Petre Alexandrescu, “*Quant à l’identification de cette mystérieuse population, elle ne me paraît pas possible dans l’état actuel de nos connaissances*” (Alexandrescu 1967, p. 88).

⁶³³ According to T. Arnăuț and R. Ursu-Naniu, an independent tribe (see Arnăuț, Naniu 1996, p. 6); For I. Țurcanu, Greeks from Histria allied with Getae (Țurcanu 2016, p. 356); after M. Kaşuba (2010, p. 489) the “Istrians” are considered, cautiously, “*either Getae, an independent tribe, or inhabitants of Histria*”. For points of view in the Bulgarian historiography, see Dimitrova 2020, p. 120–121, with references to earlier bibliography.

⁶³⁴ It is true that in northern Dobrudja there are significant discoveries for this timeframe, a fact that convinced some authors to locate here the elusive “*Rex Histrianorum*” (Pârvan 1926, p. 51–52; Daicoviciu 1991, p. 49; Opperman 2002, p. 256), but it is unlikely that any “kingdom” located in such a small region could have the means to withstand the military might of Ateas.

a high human potential, which would have allowed any local ruler to raise an army strong enough to confront a direct Scythian invasion.

Attempts to equate the “Istrians” with the Getae⁶³⁵, or Triballi⁶³⁶, are unconvincing for the simple reason that both are mentioned as such in the *Epitomes*. There is no logical reason why, for the designation of the same population, Trogus Pompeius (or later, Justinus) would have used alternately “Istrians” instead of “Getae”. The simplest explanation, in our opinion, is that there was *a distinct population with this name* living north of the Lower Danube and west of the Dniester. Taking into consideration the data above, the mentions of Pomponius Mela that we discussed earlier⁶³⁷, the “Istrian country” mentioned in Pindar’s *Olympics* (III, 25–28)⁶³⁸ or the mentions of the tattoos of the “Istrians” from Hesychios⁶³⁹, are more likely interpreted to refer to *a particular ethnic group* living the north of Danube, *distinct* from the Scythians or the Getae.

Our hypothesis could, of course, be criticized, as the historical sources are rather vague, and in the epigraphic documents discovered in the Greek cities of Pontus, so far, there are no clear mentions of “Istrians” as a distinct ethnos. On the other hand, we must keep in mind that this tribal name – if it really existed – may have disappeared completely after the end of the 3rd century BC, when the East Carpathian area underwent significant cultural and demographic transformations. As the “Istrian” elites and their hillforts faded in the mists of history, their identity changed, the name overshadowed by and confused with that of the more famous Getae and later, Dacians.

How could be explained the presence of people named “Istrians” in the northwestern extremity of the Balkan Peninsula, in the Crimean area and – with some degree of probability – in the East Carpathian space during the 4th–3rd centuries BC? It would be wrong to believe that name identity would also imply a kinship between these populations. In the ancient world, especially in the “barbarian” regions, there are known cases of distinct unrelated peoples bearing similar or identical names: we can think, for example, of the name *Venetae*, which designated a Celtic, an Italic tribe and a (probably) Proto-Balto-Slavic one. The similarity of the name may be due to its derivation from a common Indo-European root, but one cannot completely exclude other, less likely explanations⁶⁴⁰.

If the above demonstration could be sufficient to glimpse – even hypothetically – the name of the people that raised the hillforts in the area east of the Carpathians, the language (or languages) that they spoke are, unfortunately, unknown to us. The names of the great hillforts of Stâncești and Cotnari, of their builders, rulers and heroes, will remain a mystery, likely never to be solved...

The first part of our conclusion discusses some of the causes that led to the emergence – especially between the Siret and Dniester rivers – of such a significant number of hillforts between the 5th–3rd centuries BC. So far, however, we have scarcely addressed the issue of the *collapse* of this culture. Although the achievements from these centuries might appear to us to be significant, the civilization which built the hillforts that we analyzed in this volume, just like other illiterate civilizations from Temperate Europe of the Late Iron Age, suffered from a certain *fragility*, manifested by an intrinsic vulnerability to political, military, or social changes.

It is tempting to see in the arrival of the bearers of the Poienești – Lucașeuca culture (the historical Bastarnae) the main cause of the destruction and abandonment of the hillforts, but the reasons

⁶³⁵ Pârvan 1926, p. 52; L. Nistorescu considers “Rex Histrianorum” to be the same with the historical Kothelas, and equates the “Istrians” with the Getae (2010).

⁶³⁶ Iliescu 1969, p. 190.

⁶³⁷ In the works of Mela the “Getae” are also mentioned distinctly (§ 2.18).

⁶³⁸ After *Fontes I*, p. 13.

⁶³⁹ After *Fontes I*, p. 91.

⁶⁴⁰ The result of ancient migrations and admixtures during Late Bronze and Early Iron Ages, etc. A possible Veneto – Illyrian substratum cannot be excluded.

for the collapse seem to have been much more complex. Climate change in the North-Pontic steppes and the fall of Scythia to the incoming Sarmatians⁶⁴¹, the effects of the Celtic migrations into the Balkans have undoubtedly played their part in a cumulated effect that led over time to the destabilization and weakening of the society.

In any case, around 220 BC the hillforts seem to be abandoned or destroyed, never to be rebuilt again. In some cases, for example at Arsura, Poiana Mănăstirii, Moșna, sporadic traces of Poieniști – Lucașeuca materials have been discovered, but so far no features or dwellings. Possibly the newcomers, after taking over the hillforts, settled in them for a while, but with no intention to rebuild or to reuse the old fortifications. The type of society brought in by the newcomers was different, their structure of power and its military ethos different. For almost a century and a half, the Bastarnae would exhaust themselves in numerous expeditions and wars against their neighbors, pressing especially southwards.

In any case, the cultural discontinuity seen in the last quarter of the 3rd century BC in the East Carpathian lands is obvious: hillforts are abandoned, settlement type and pattern change, funerary rite and rituals changed. In the new framework, there is little of the previous society and its materiality that continues, beyond certain types of common vessels. We may assume that a part of the local population perished in the turmoil, but other groups could have migrated elsewhere, likely to the west of the Siret river, towards Eastern Transylvania or in a southern direction, towards the Wallachian Plain. Continuing excavations on sites located on both flanks of the Curvature Carpathians, might confirm or infirm over time these scenarios. In any case, a pressing question appears. To what degree did these groups contribute to the rise of the later Dacian society?

A continuity in vessel shape is clearly visible, and apparently, one of the most specific Dacian vessel-type, the fruit bowl, appears for the first time in Stănțești hillfort. The circular Dacian temples, with their specific shape, have an interesting predecessor in the round temple discovered in the hillfort of Butuceni (Republic of Moldova)⁶⁴². A close analysis of materiality would bring to light, undoubtedly, numerous elements of continuity, and future researches are expected to fill in some of the existing gaps. From this point of view, the East-Carpathian area of the 5th–3rd centuries BC can be hypothetically one of the areas that might have contributed to the new cultural synthesis that would characterize the Carpatho-Danubian lands during the 2nd century BC – 1st century AD.

On the other hand, there are also visible elements of discontinuity and change. The later Dacian civilization that rose after the middle of the 2nd century BC proposes different social and cultural models; the Dacian hillfort, conceptually, has almost nothing in common with the hillforts of the early Late Iron Age⁶⁴³. In many ways, the Dacian hillfort is the expression of a strongly stratified society, almost “proto-feudal” in shape, which, seduced by “southern” models of power, abandons, in part, its Iron Age heritage.

We conclude this volume, without claiming to have exhausted the subject, but hoping that our efforts will represent a step forward in knowledge. Our work is nothing but a stage in a long path of research, marked by names of dedicated archaeologist such as Adrian C. Florescu, and many others. Shrouded by the mystery of past centuries, the hillforts will, undoubtedly, continue to fascinate future generations of archaeologists. We hope that the ideas and approaches that we presented will generate constructive discussions and polemics, which will further our knowledge about the East-Carpathian hillforts of the early Late Iron Age, about their builders and their ultimate historic destiny.

⁶⁴¹ Скрипкин 2016, p. 17–32.

⁶⁴² Niculiță *et alii* 2002, p. 41–42.

⁶⁴³ See, in this regard, the discussions in Florea 2011.

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■ PLATES

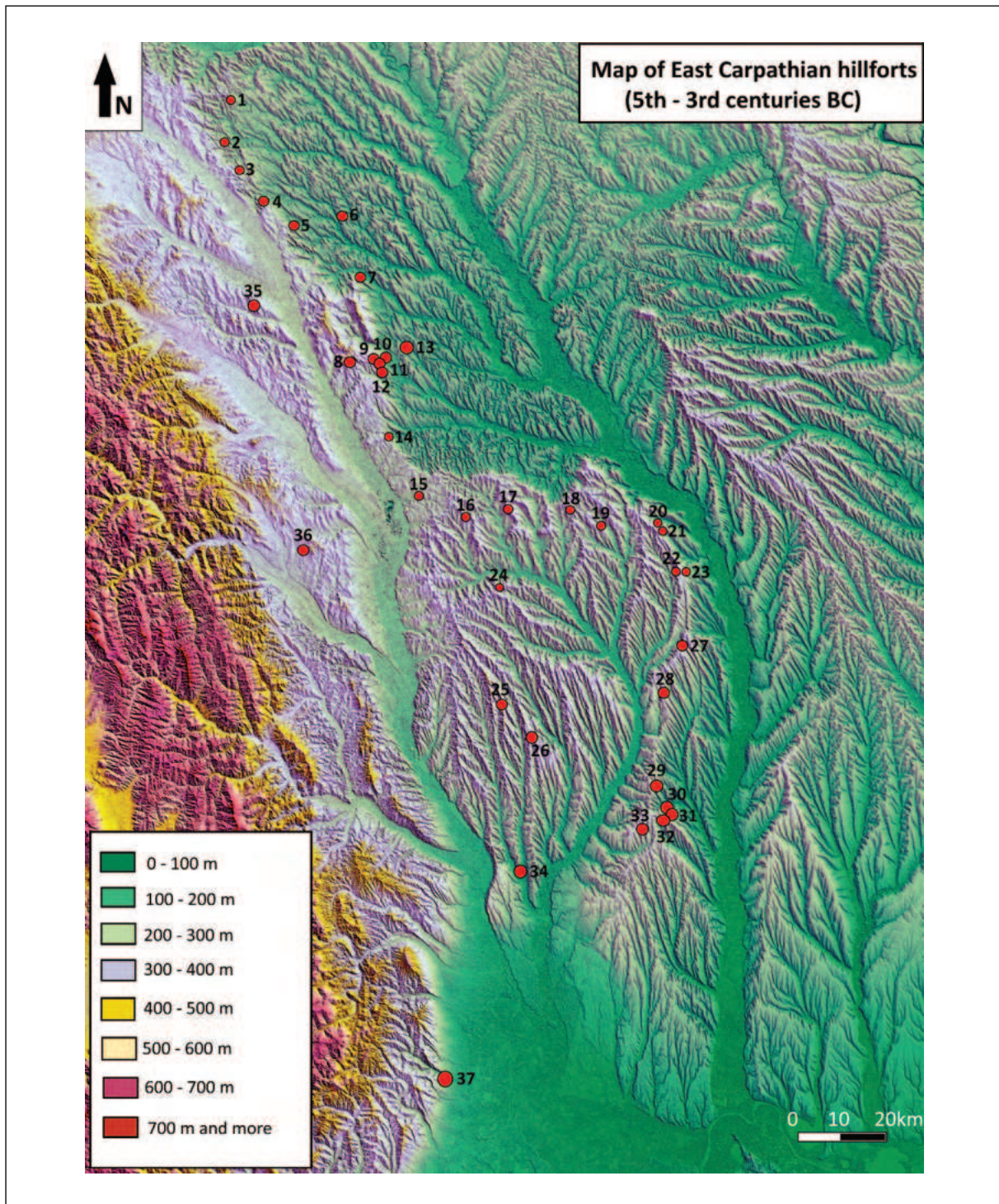


PLATE 1. Map of East Carpathian hillforts from 5th–3rd centuries BC. 1. Ibănești-Măgura Ibăneștilor; 2. Șendriceni-Dealul Țiclău; 3. Văculești-Dealul Podiș; 4. Bucecea / Cervicești-Pădurea Găvanului; 5. Stănțești-Cetate / Bobeica; 6. Victoria-Șanțul Caterinei; 7. Cotu-Copălău-Cetate; 8. Todirești-Dealul Șanțurilor; 9. Scobinți-Basaraba; 10. Scobinți-Dealul lui Vodă; 11. Buhalnița-Cetate; 12. Cotnari-Cătălina; 13. Scobinți-Grădiște; 14. Crivești-Cetate; 15. Oțeleni / Bira-Cetate; 16. Dagăța-Dealul Șanțurilor; 17. Poiana Mănăstirii-Între Șanțuri; 18. Poiana cu Cetate-Cetate; 19. Dobrovăț-Cetățuia; 20. Bazga-Cetățuia; 21. Moșna-Cetate; 22. Bunești-Dealul Bobului; 23. Arsura-Cetățuia Mogoșești; 24. Dumești / Rafaila – Zarea Rafailiei; 25. Stănișești / Răchitoasa-Cetățuia; 26. Cetățuia-Cetățuia Strâmba; 27. Crețești-Cetățuia; 28. Albești-Cetățuia; 29. Fedești-Cetățuia; 30. Bârlălești-Cetățuia Foișor; 31. Murgeni-Cetățuia Ciomaga; 32. Mălușteni-Cetățuia; 33. Vinderei-Cetățuia; 34. Brăhășești-Cetățuia; 35. Merești-Cetățuia; 36. Dochia-Cetățuia Sărățica; 37. Căndești-Coasta Nacului.

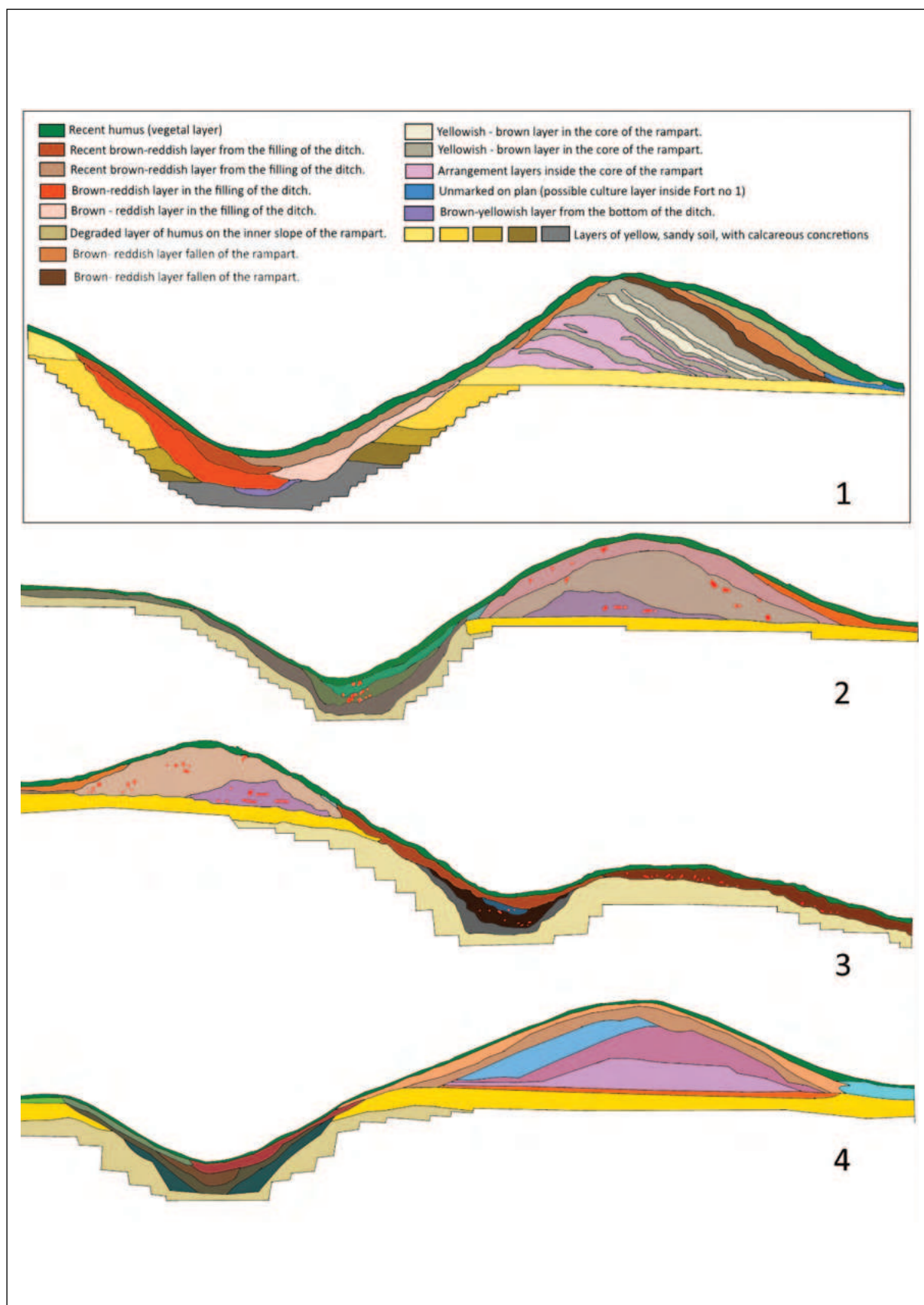


PLATE 2. Sections of the ramparts in the Stâncești hillfort (after Florescu, Florescu 2005). 1. Fort 1, trench L1 (with legend); 2. Fort 1, trench L; 3. Fort 2, trench L1; 4. Fort 2, trench t1.

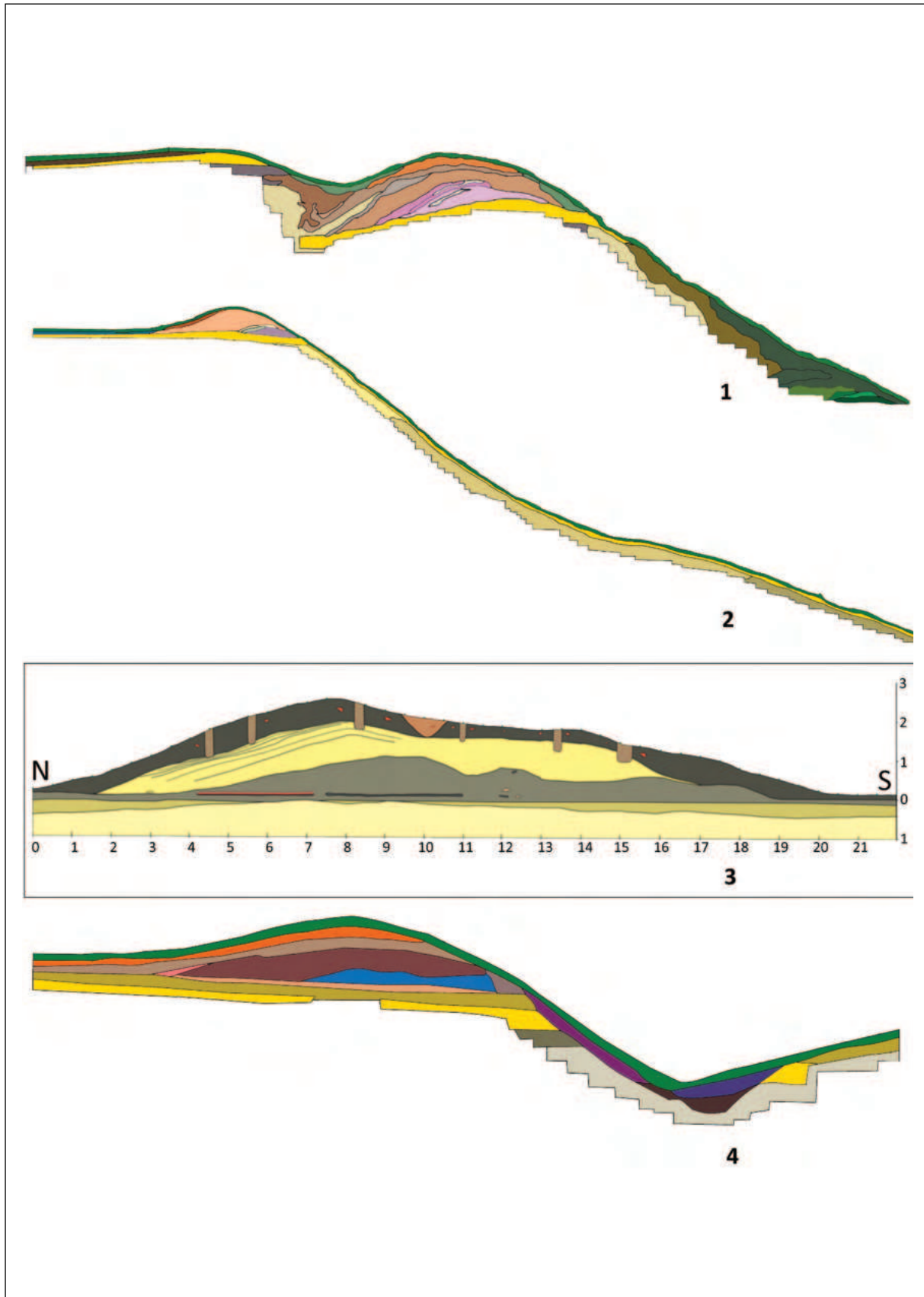


PLATE 3. Sections of the ramparts in various hillforts. 1. Stâncești, Fort 2, trench t5 (after Florescu, Florescu 2005); 2. Stâncești, Fort 2, trench t2 (after Florescu, Florescu 2005); 3. Poiana Mănăstirii; 4. Moșna (after Florescu 2022).

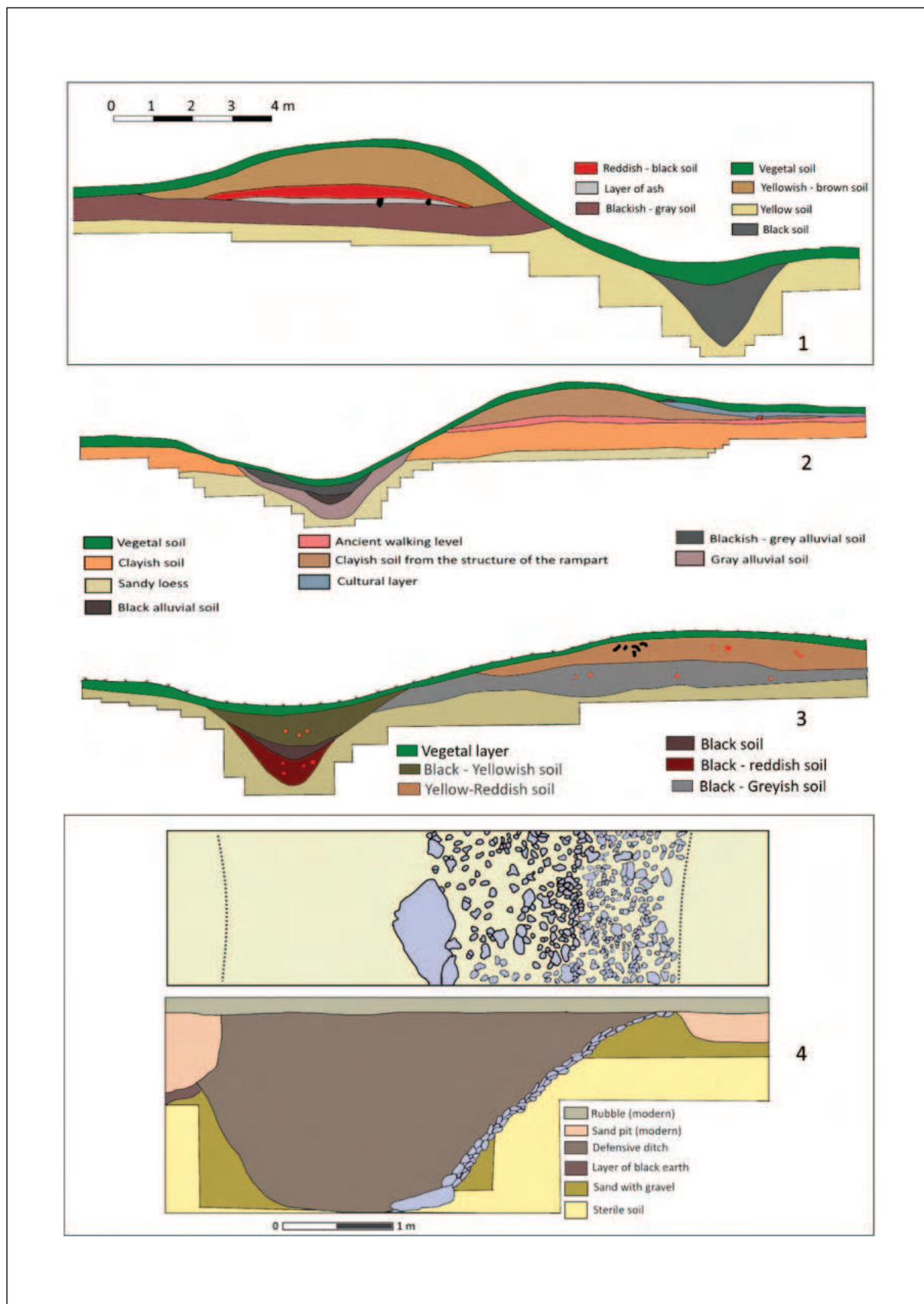


PLATE 4. Sections of the ramparts in various hillforts. 1. Cotu-Copălău, S V (after Şovan, Ignat 2005); **2.** Cotu-Copălău, S II (after Şovan, Ignat 2005); **3.** Cotu-Copălău S III (after Şovan, Ignat 2005); **4.** Ibăneşti, plan and section of the vestigial rampart and ditch (after Şadurschi, Moscalu 1989).

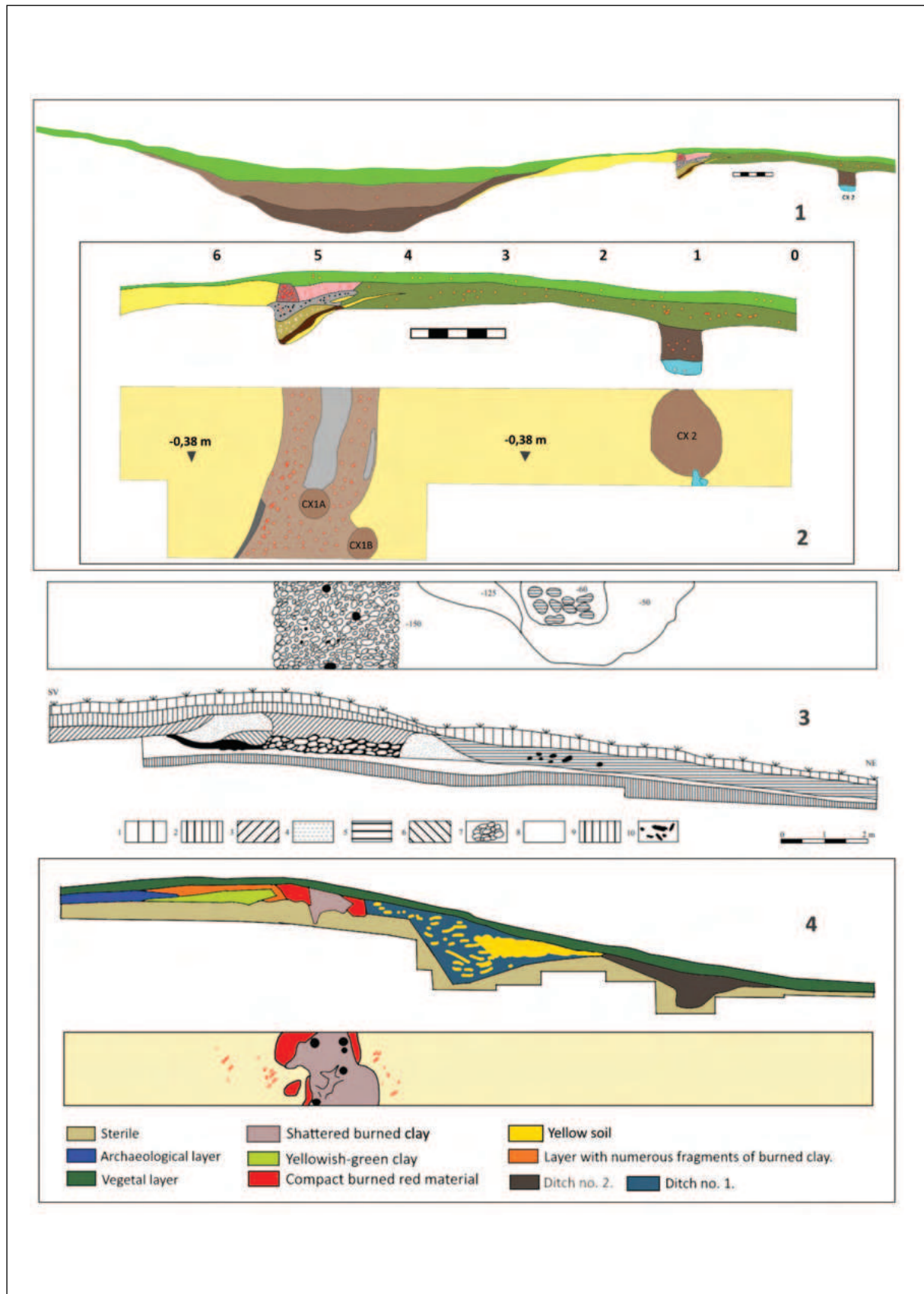


PLATE 5. Sections and plans of ramparts in various hillforts. 1. Dobrovăț. General section of S5/2021; 2. Dobrovăț. Section and plan of S5/2021. Detail with the palisade; 3. Arsura. Plan and section (after Zanoci 2011); 4. Brăhășești. Section and plan (after Brudiu, Păltănea 1972).

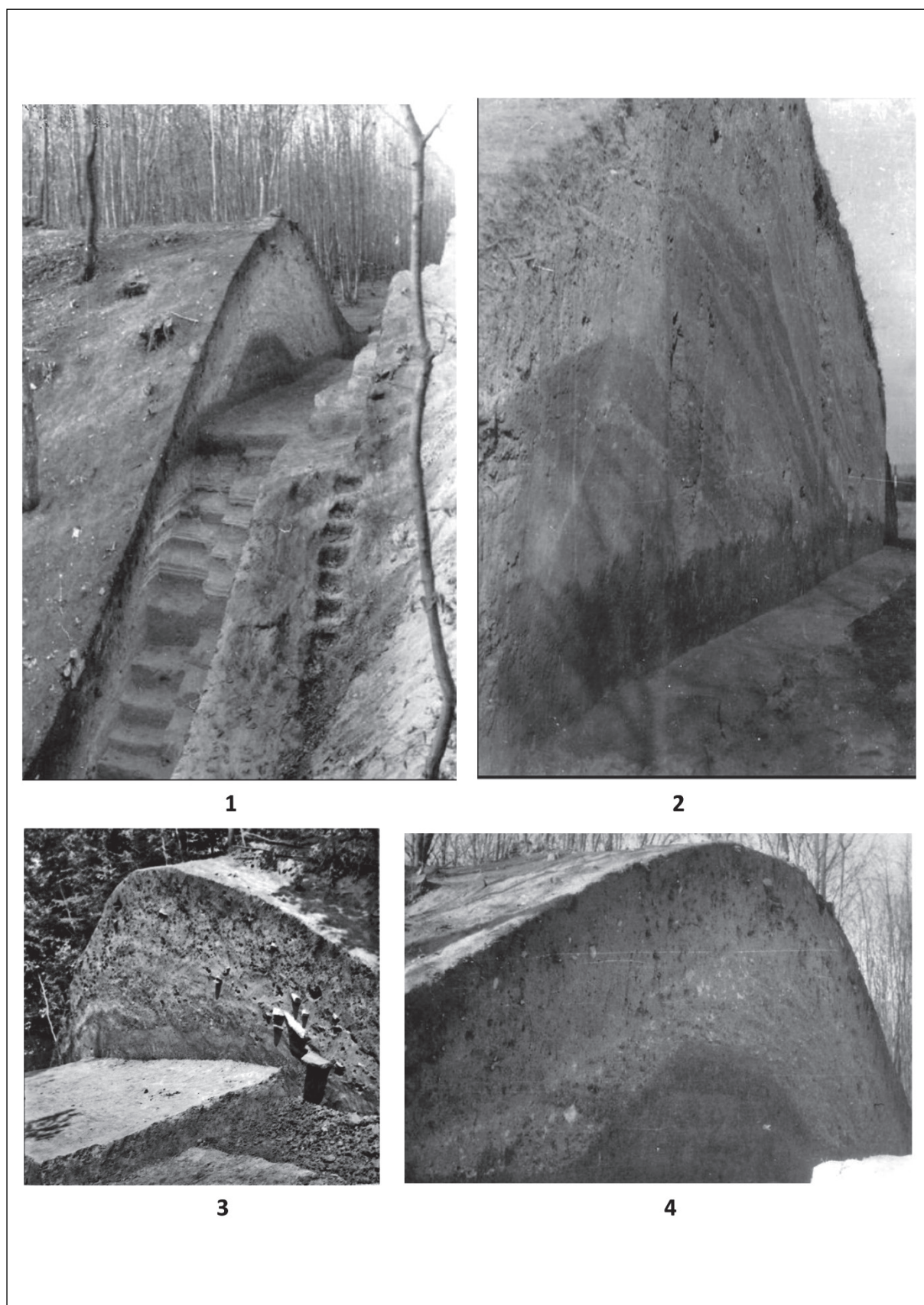
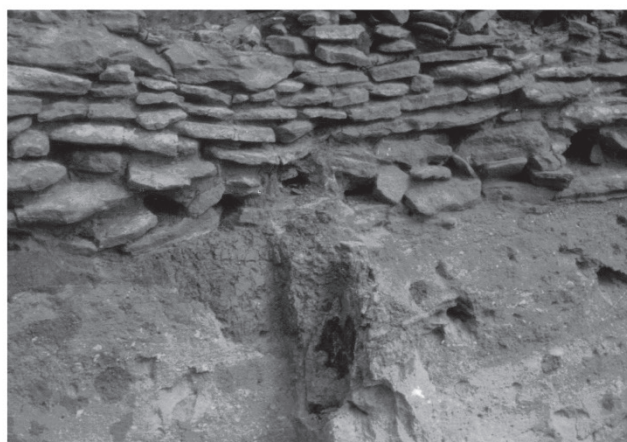


PLATE 6. Photography of ramparts from Stâncești (Botoșani County Museum Archive). 1, 2–3. Fort 2; 2. Fort 1.



PLATE 7. The defensive system in Dobrovăț-Cetățuia hillfort researched during the 2021 campaign. 1. Photo-mosaic of S 5 / 2021 with the rampart, ditch and palisade during two excavation stages; **2.** The palisade. Initial contouring; **3.** The palisade. First stage of excavation; **4.** The palisade. Final stage of excavation.



1



2



3



4

PLATE 8. Cotnari-Cătălina hillfort, Enclosure A. 1–4. Stone masonry (*Archive of the Iași Institute of Archaeology*).

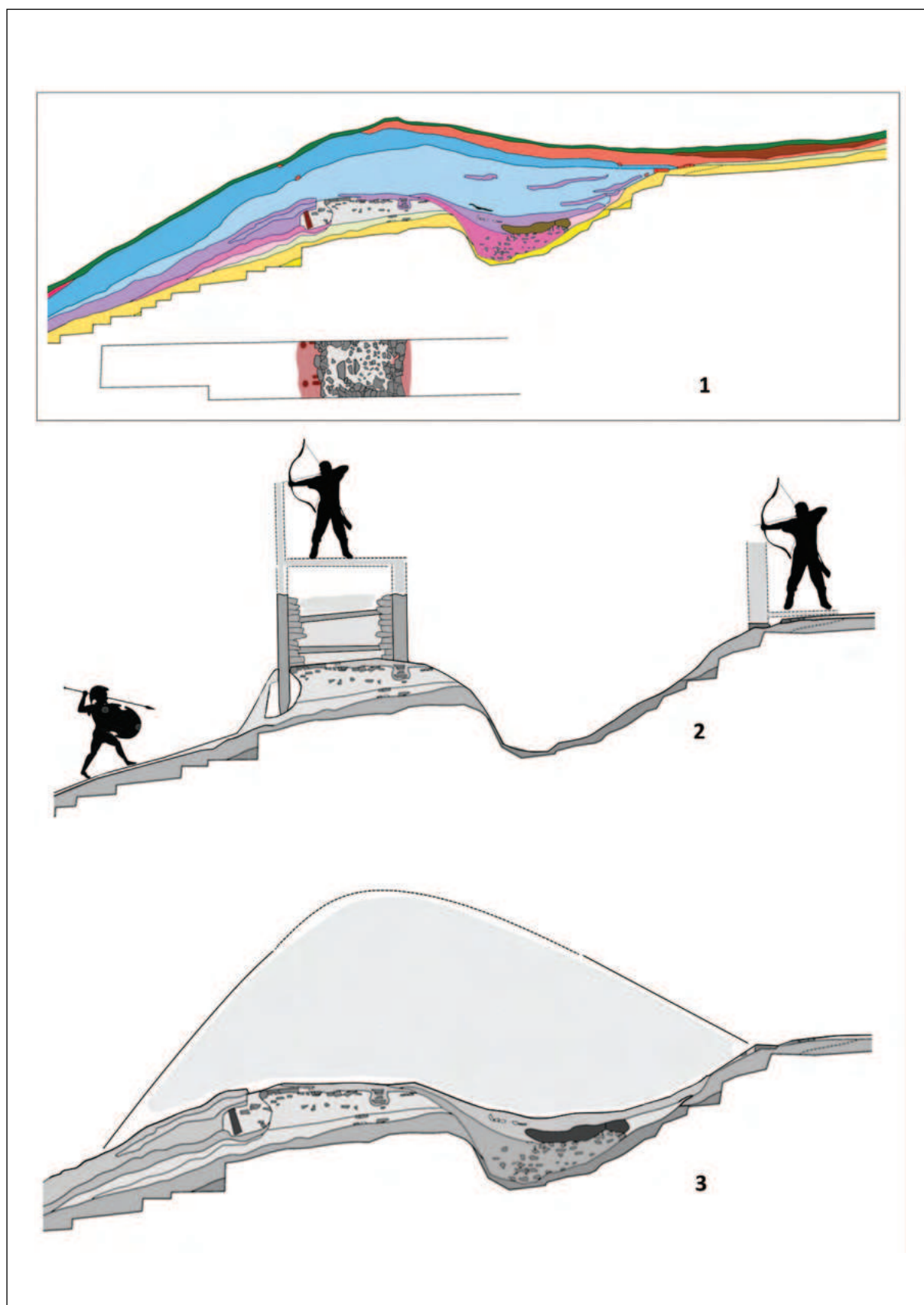


PLATE 9. Cotnari-Cătălina hillfort, Enclosure A. 1. Section and plan of S I (*Archive of the Iași Institute of Archaeology*). 2–3. Interpretation of the evolution stages of the defensive system.

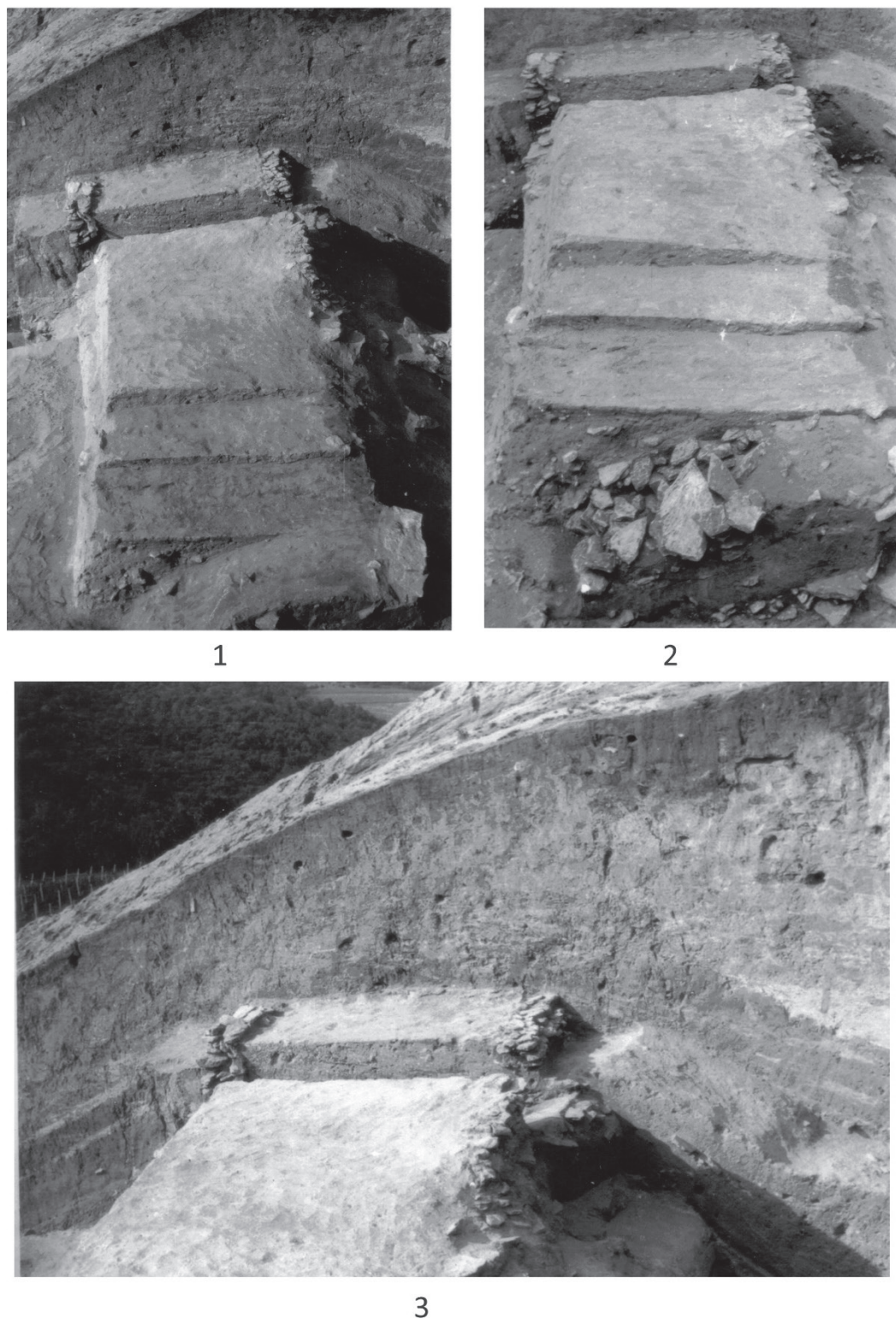


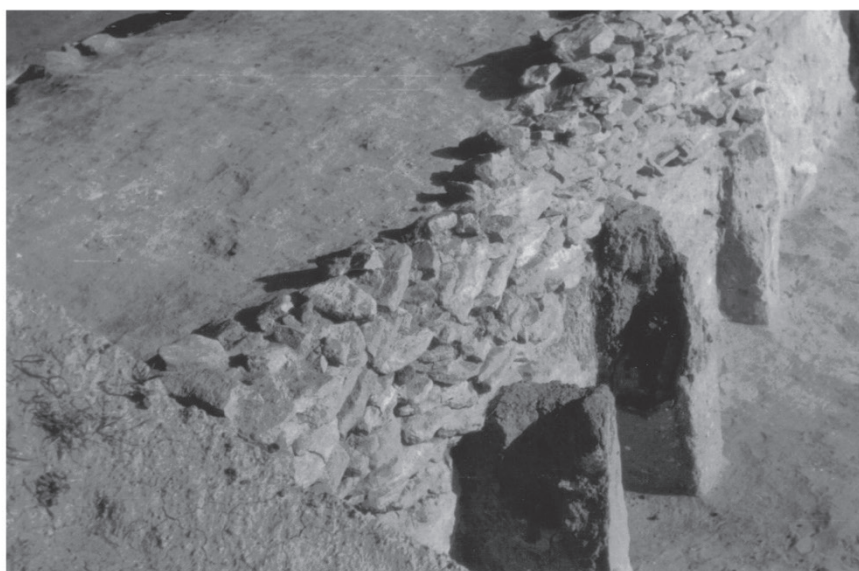
PLATE 10. Cotnari-Cătălina hillfort, Enclosure A. 1-3. The stone wall superimposed by the rampart (Archive of the Iași Institute of Archaeology).



1



2



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PLATE 11. Cotnari-Cătălina hillfort, Enclosure A. 1–3. Detail with the Pfostenschlitzmauer. Postholes have been excavated in positive (*Archive of the Iași Institute of Archaeology*).

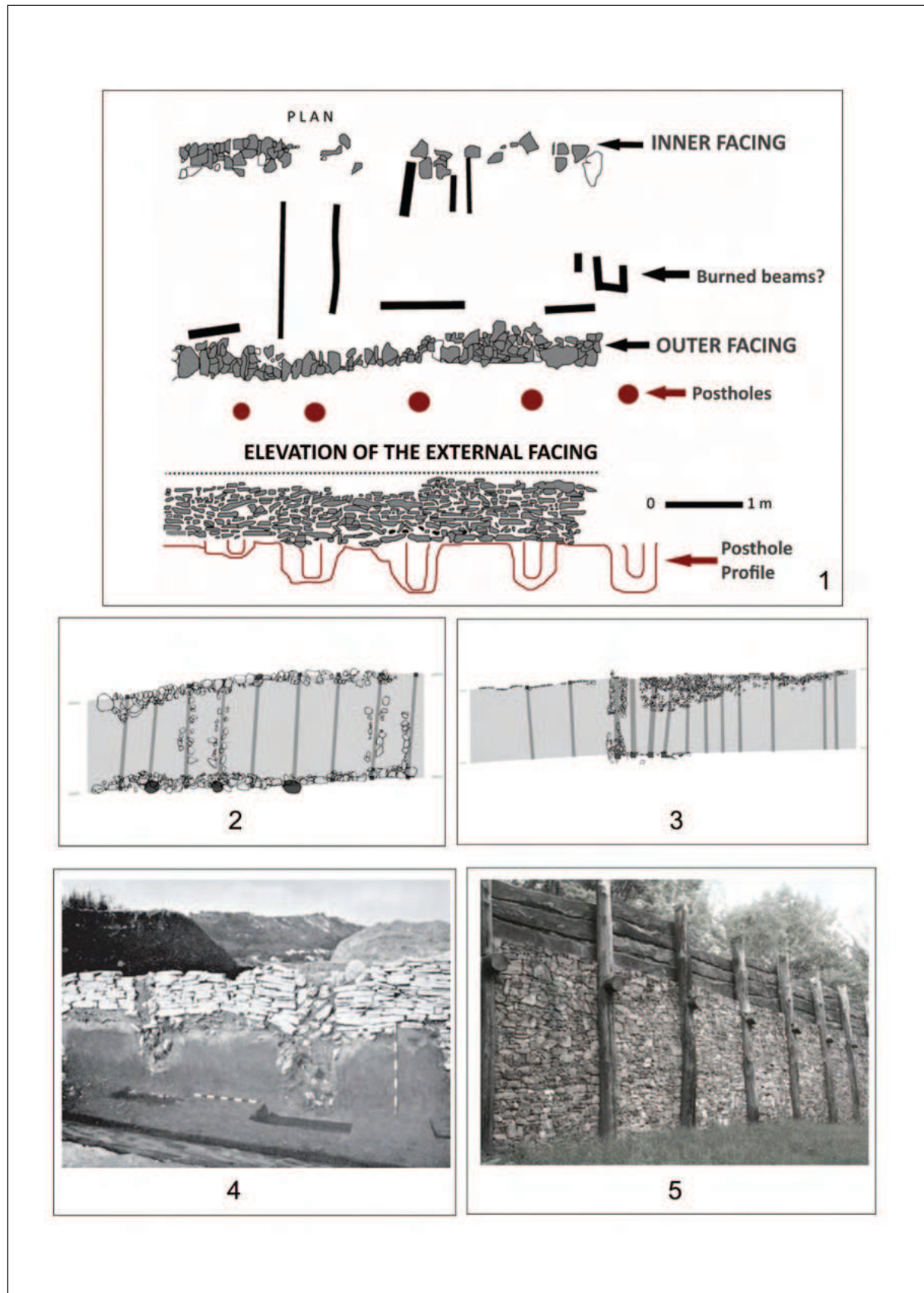


PLATE 12.1. Cotnari-Cătălina hillfort. Plan and elevation of the wall (*Archive of the Iași Institute of Archaeology*); 2. Pfostenschlitzmauer at Glauberg (after Baitinger, Kresten 2012, p. 496, Abb. 2); 3. Pfostenschlitzmauer at Limburg (after Ballmer 2018, p. 139, fig. 11); 4. Pfostenschlitzmauer at Kellheim (after Ballmer 2018, p. 136, fig. 11.2); 5. The reconstruction of the wall surrounding the oppidum of Donnersberg.



1



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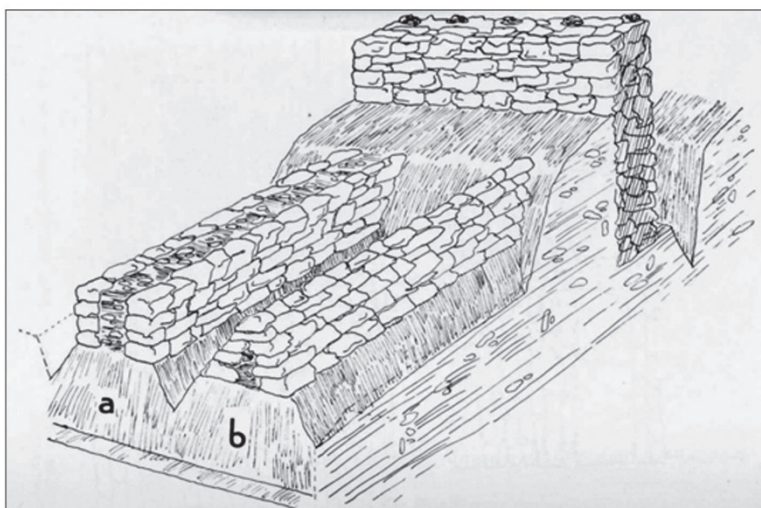
PLATE 13. Cotnari-Cătălina hillfort, Enclosure A. 1–2. The stone wall and rampart; **3.** Possible foundation of a circular tower? (*Archive of the Iași Institute of Archaeology*).



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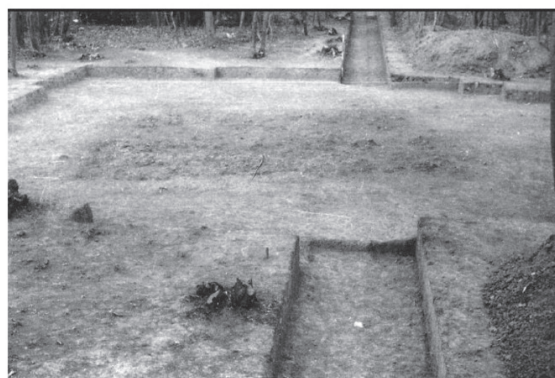
PLATE 14. 1. Cotnari-Cătălina hillfort, Enclosure A. Possible foundation of a circular tower? (*Archive of the Iași Institute of Archaeology*). 2. Cotnari-Cătălina hillfort. Enclosure A. Stone walls laid perpendicular on the main wall (*Archive of the Iași Institute of Archaeology*); 3. Stone walls laid perpendicular on the main wall in the oppidum from Trisov (after Jiří 1966).



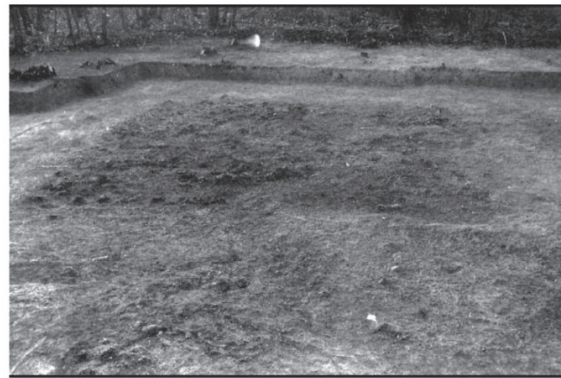
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PLATE 15. 1–6. Surface dwellings from Stâncești hillfort, Fort no 2 (after Florescu, Florescu 2005).

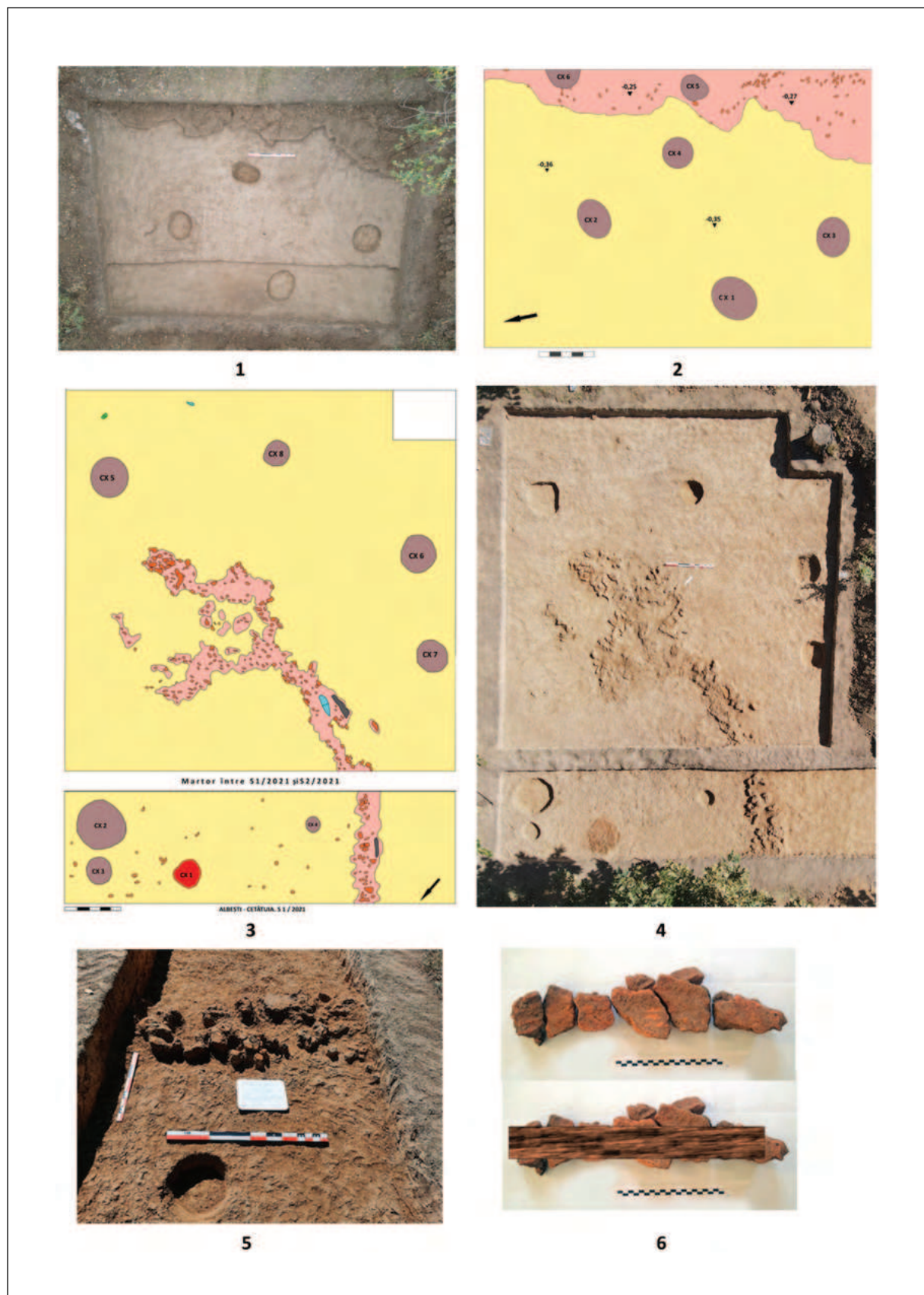


PLATE 16. 1–2. Dobrovăț hillfort. Surface dwelling L 2 / 2021 (intermediary photo and drawing). 3–4. Albești hillfort. Surface dwelling L 1 / 2021 (drawing and photography); 5. Albești hillfort. Detail with the burned adobe (wall remains) and posthole; 6. Albești hillfort. Imprint of a beam on a number of burned adobe fragments.

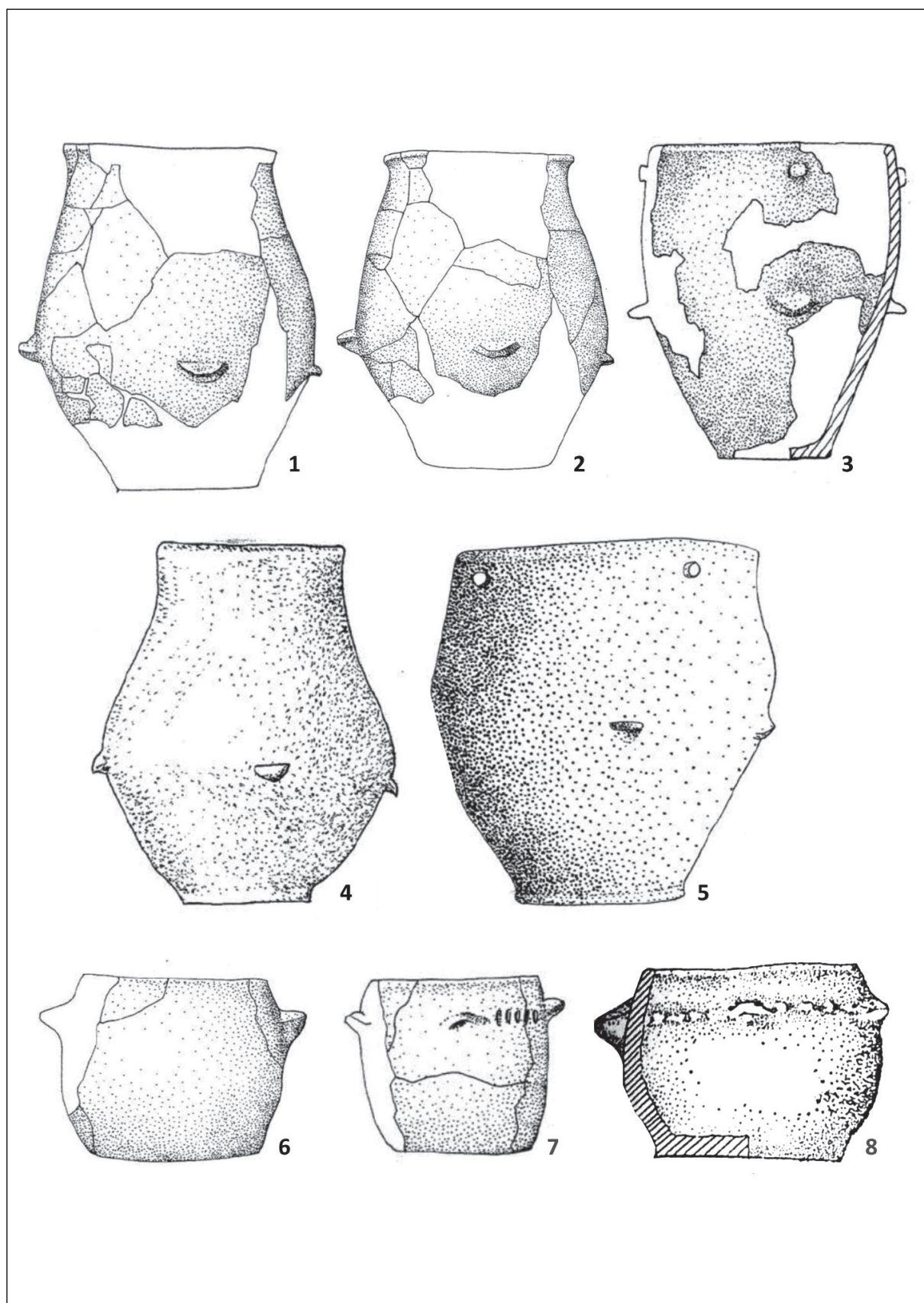


PLATE 17. Various types of jars. 1–7. From Stâncești hillfort (after Florescu, Florescu 2005); **8.** From Bunești hillfort (after Teodor 1999).

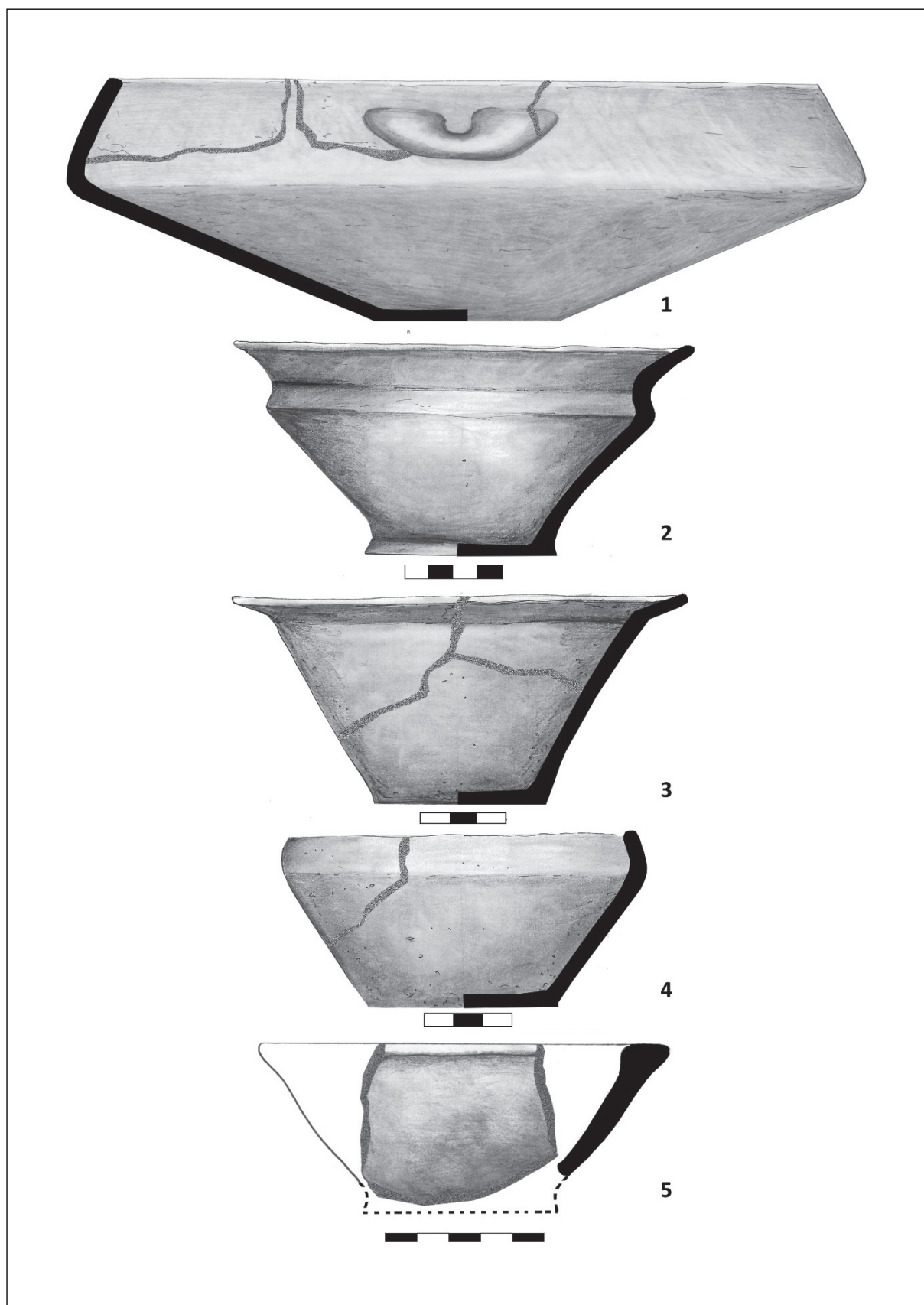


PLATE 18. Various type of dishes and bowls. 1. Cotnari-Cătălina hillfort; **2–4.** Stâncești hillfort; **5.** Dobrovăț hillfort.

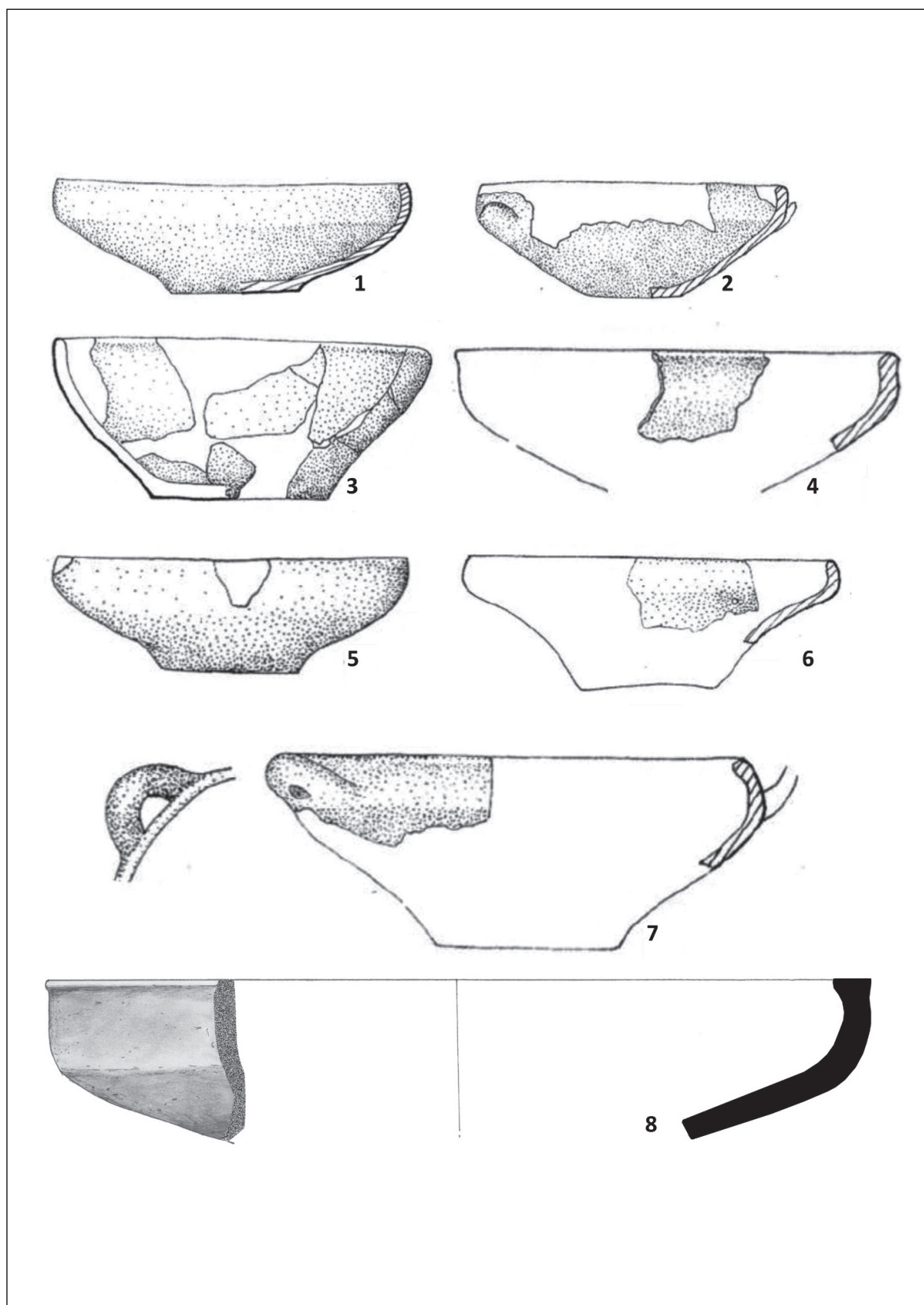


PLATE 19. Various types of dishes and bowls. 1–7. Stâncești hillfort (after Florescu, Florescu 2005); 8. Bazga hillfort.

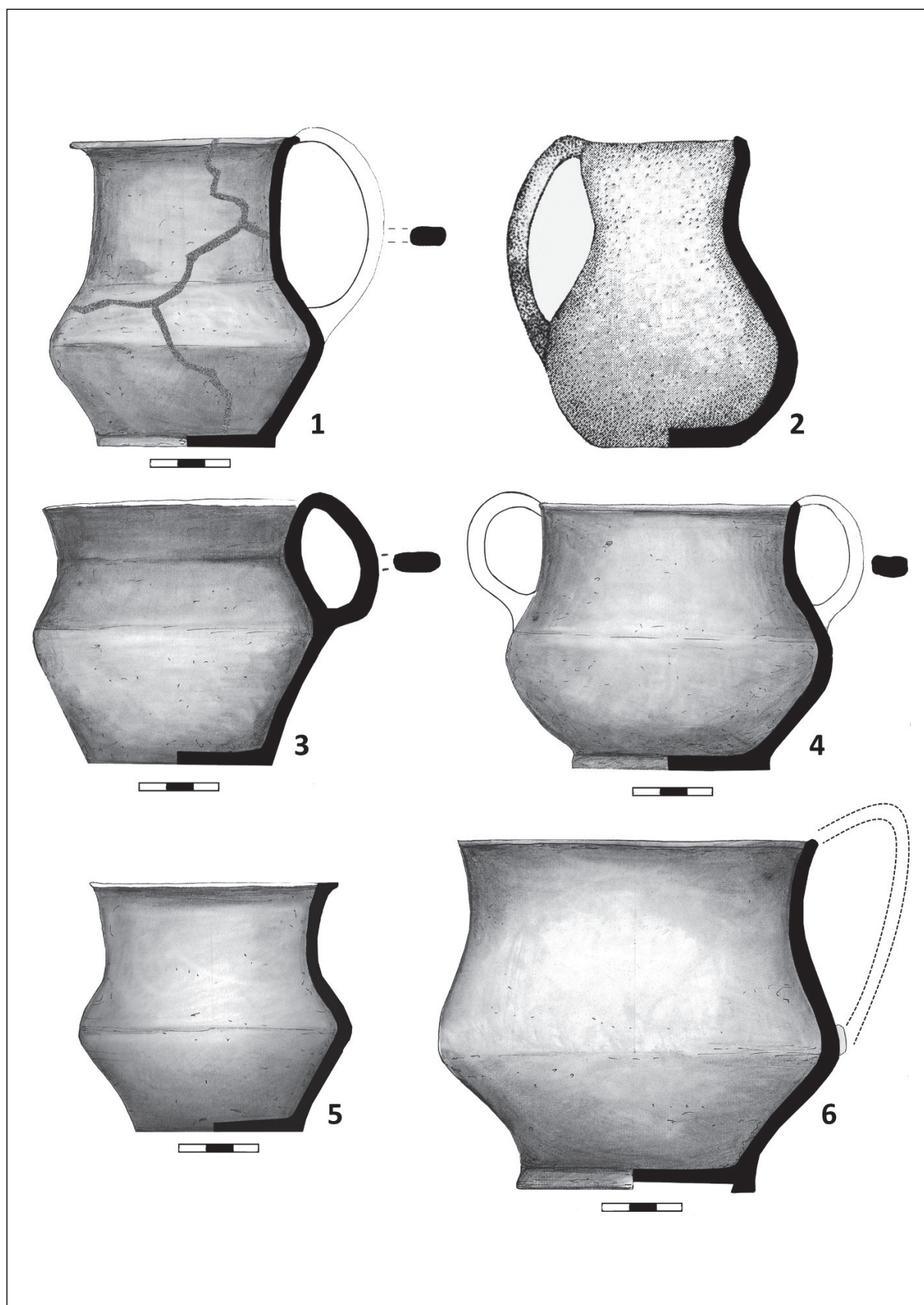


PLATE 20. Various types of mugs and jugs. 1, 3–6. Stâncești hillfort; 2. Bunești hillfort (after Bazarciuc 1983).

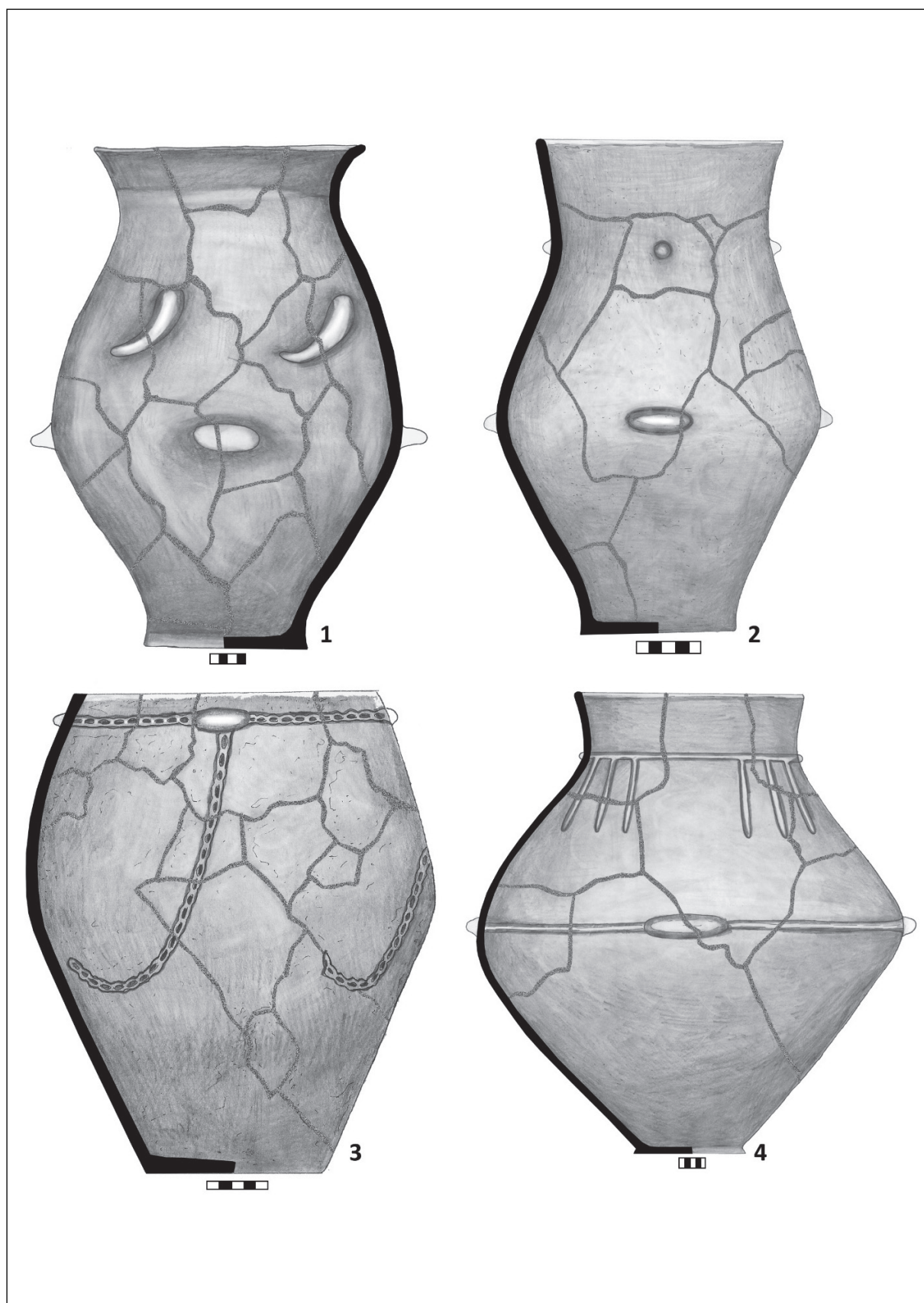


PLATE 21. Various types of supply vessels. 1. Mălușteni hillfort; 2–4. Cotnari-Cătălina hillfort.

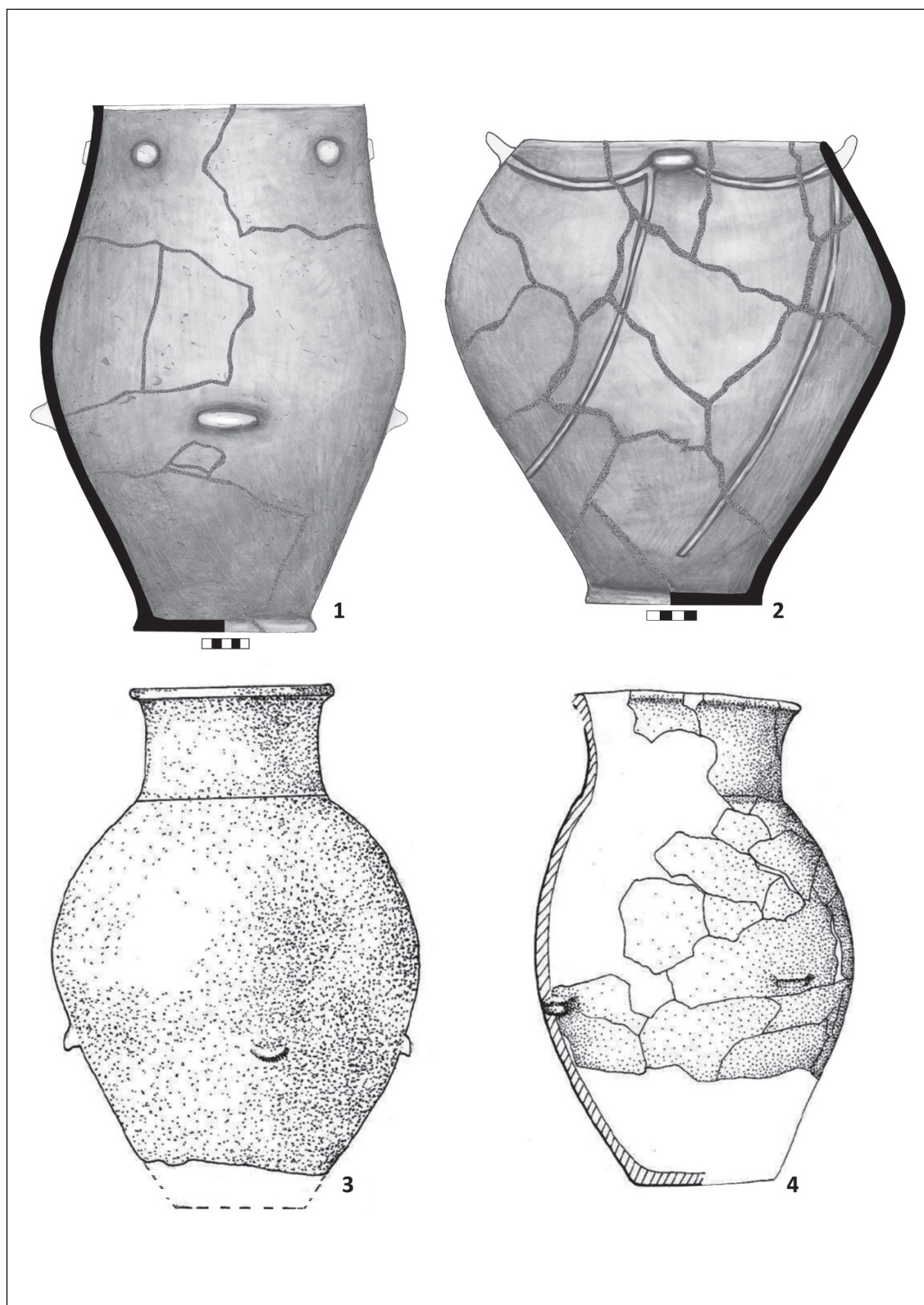


PLATE 22. Various types of supply vessels. 1. Cotnari-*Cătălina* hillfort; **2.** Mălușteni hillfort; **3–4.** Stâncești hillfort (after Florescu, Florescu 2005).

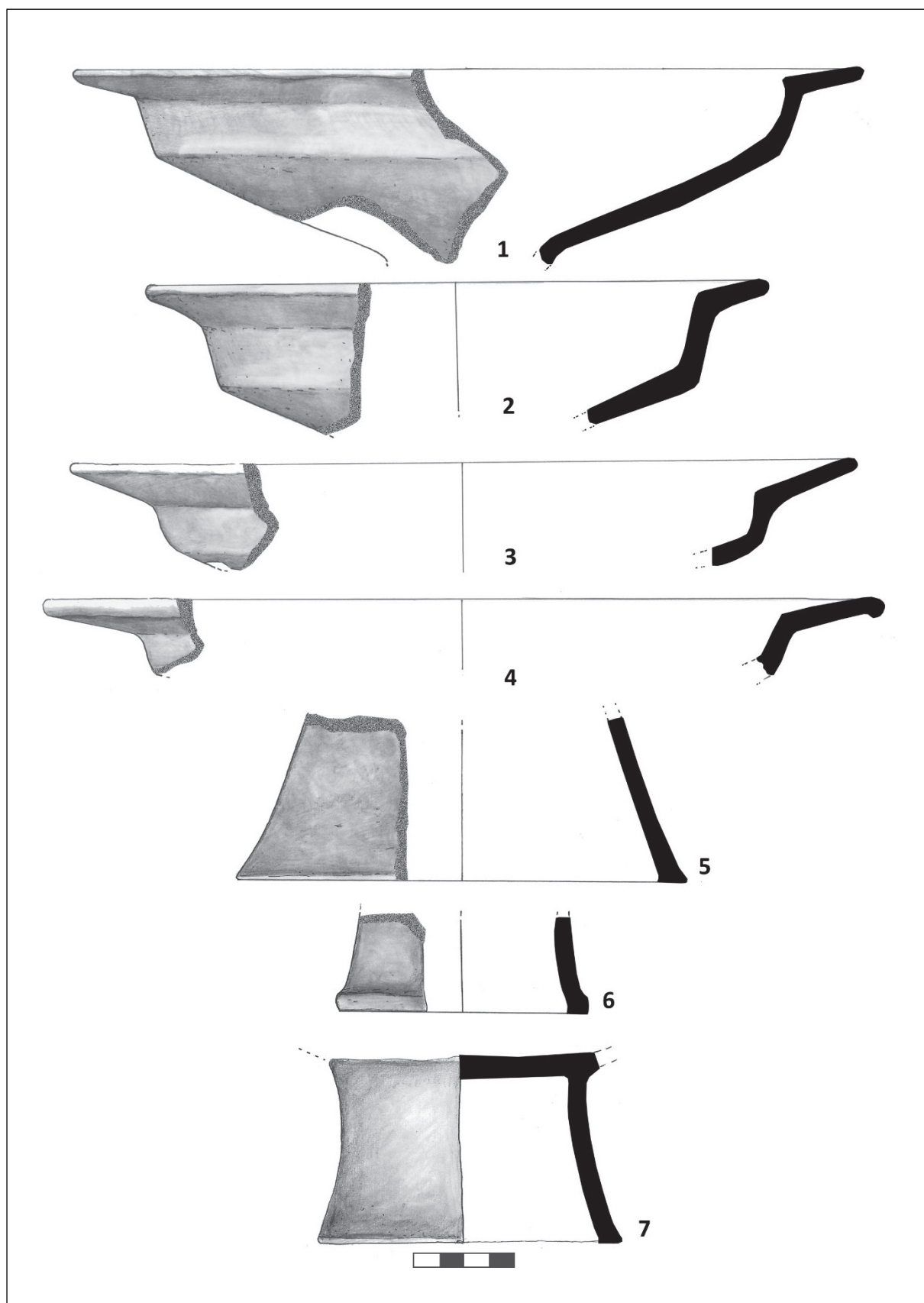


PLATE 23. Fruitbowls discovered at Stâncești hillfort (fragments).

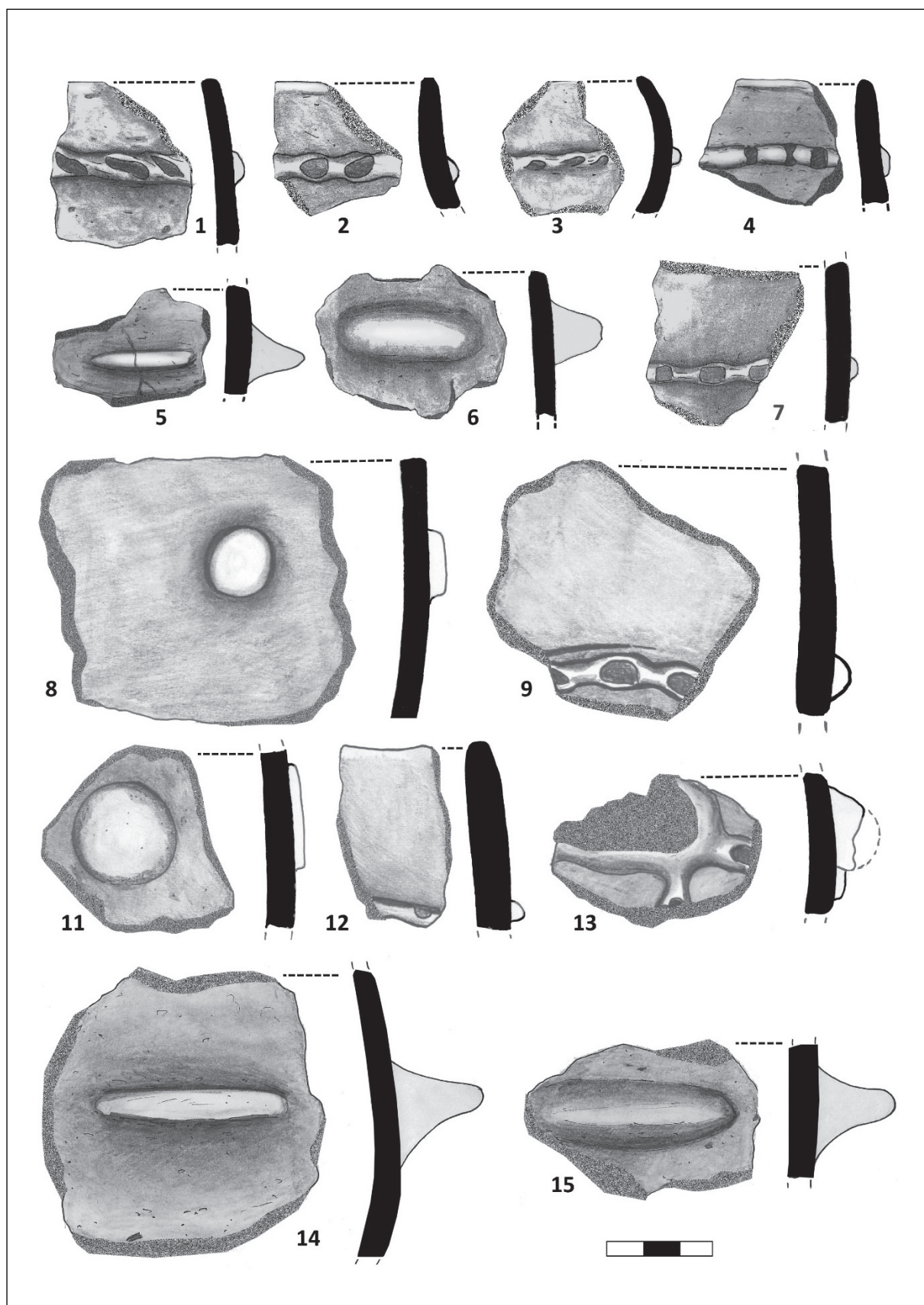


PLATE 24. Various pottery fragments with ornaments. 1-7. Crivești hillfort; 8-12. Dobrovăț hillfort; 13-14. Cotnari-Cătălina hillfort.



PLATE 25. Photo of various types of local vessels found in the Stâncești hillfort.

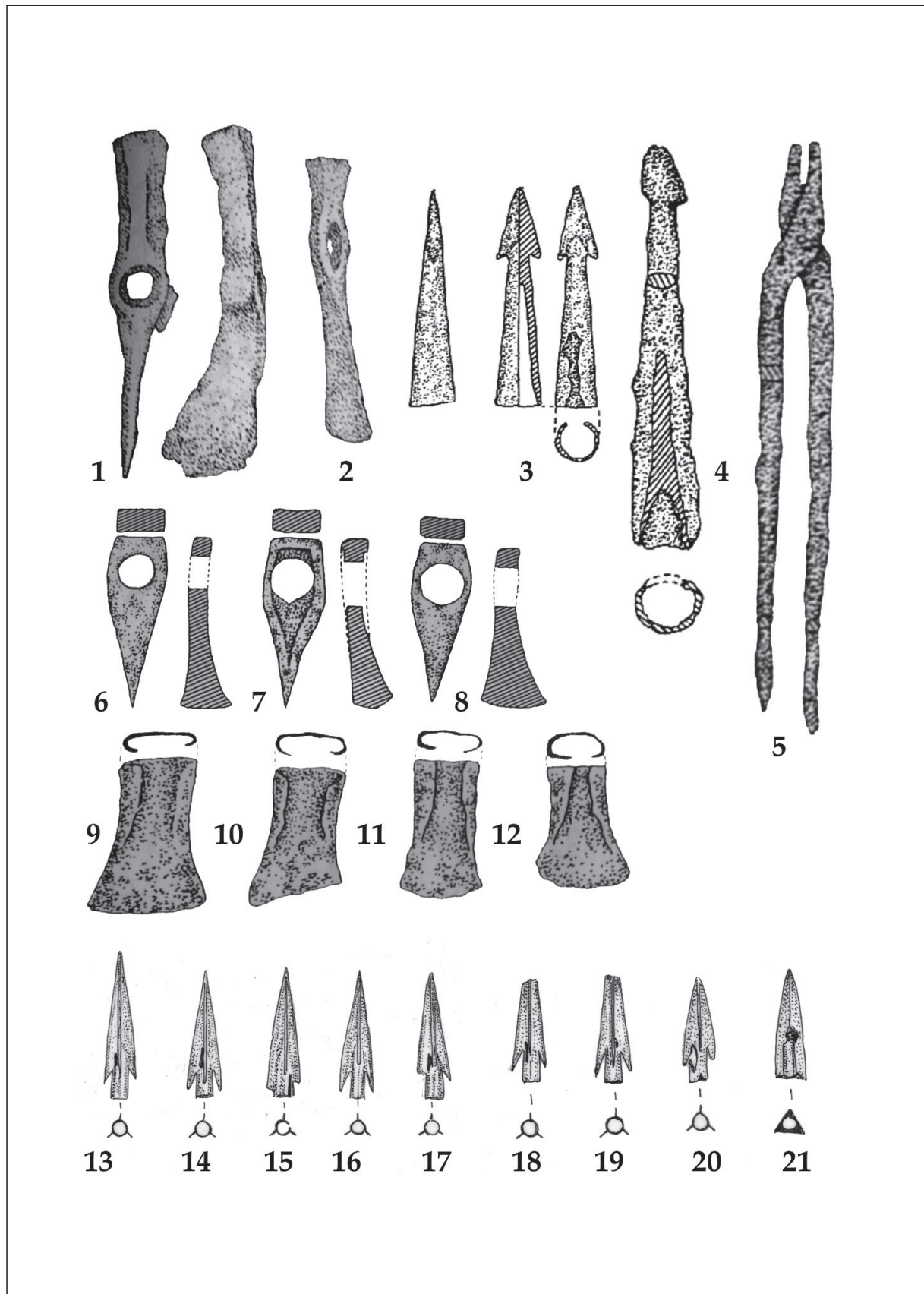


PLATE 26. Various tools and weapons found in the hillforts. 1–2, 6–12. Iron axes from Bunești fort (after Teodor 1999); 3–4. Iron weapons found in the Bunești hillfort (after Teodor 1999); 5. Iron pliers found in the Bunești hillfort (after Teodor 1999); 13–21. Various “Scythian”-type bronze arrowheads found in the Bazga hillfort (drawings by Romeo Ionescu).

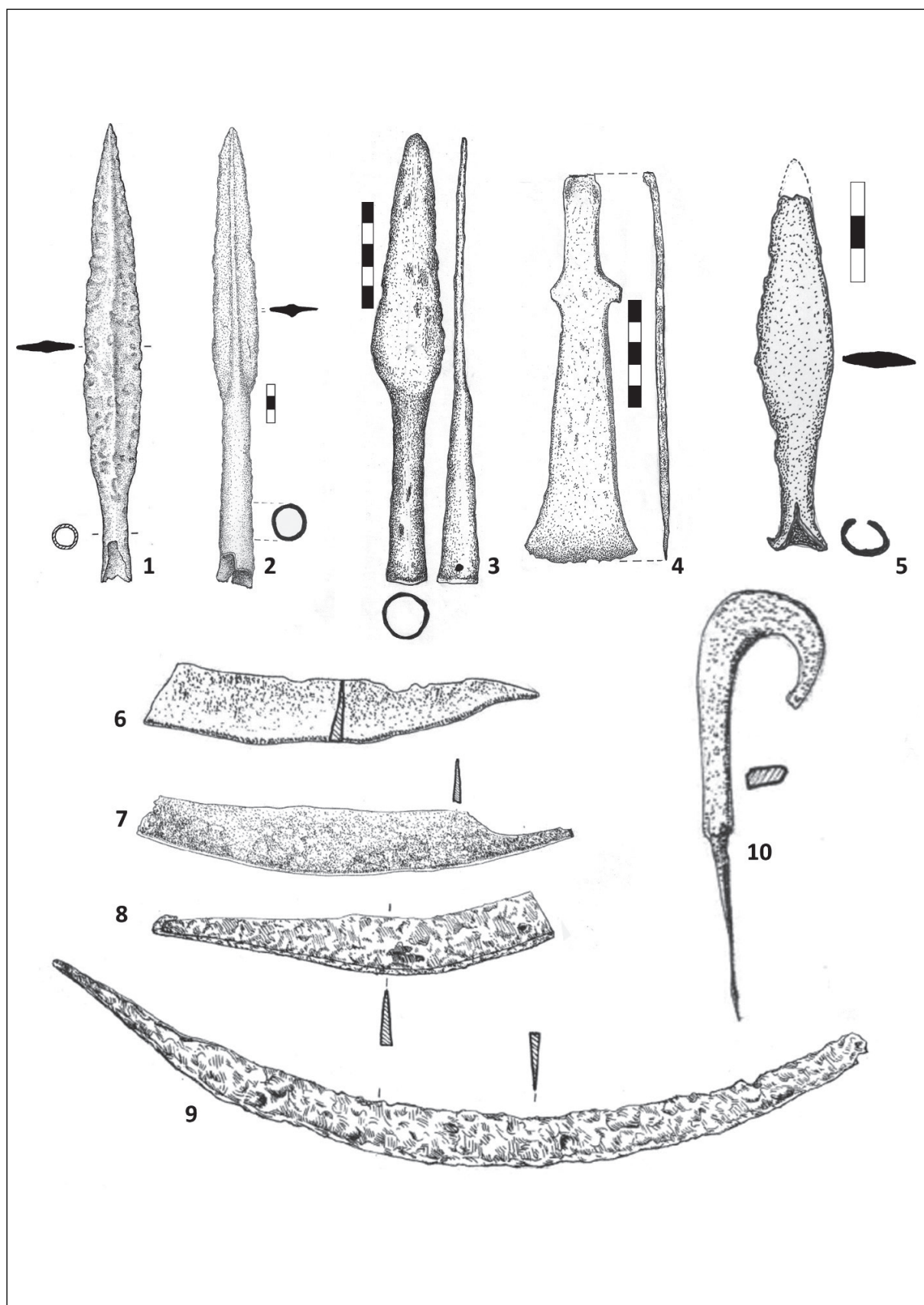


PLATE 27. Various tools and weapons found in the hillforts. 1. Lance from Stâncești hillfort (after Florescu, Florescu 2005); 2. Lance from Fedești hillfort; 3. Spear from Cotnari-Cătălina hillfort; 4. Winged axe from Cotnari-Cătălina hillfort; 5. Javelin head from Murgeni – Ciomaga hillfort; 6–9. Sickles from Stâncești hillfort (after Florescu, Florescu 2005); 10. Pruning knife from Stâncești hillfort (after Florescu, Florescu 2005).

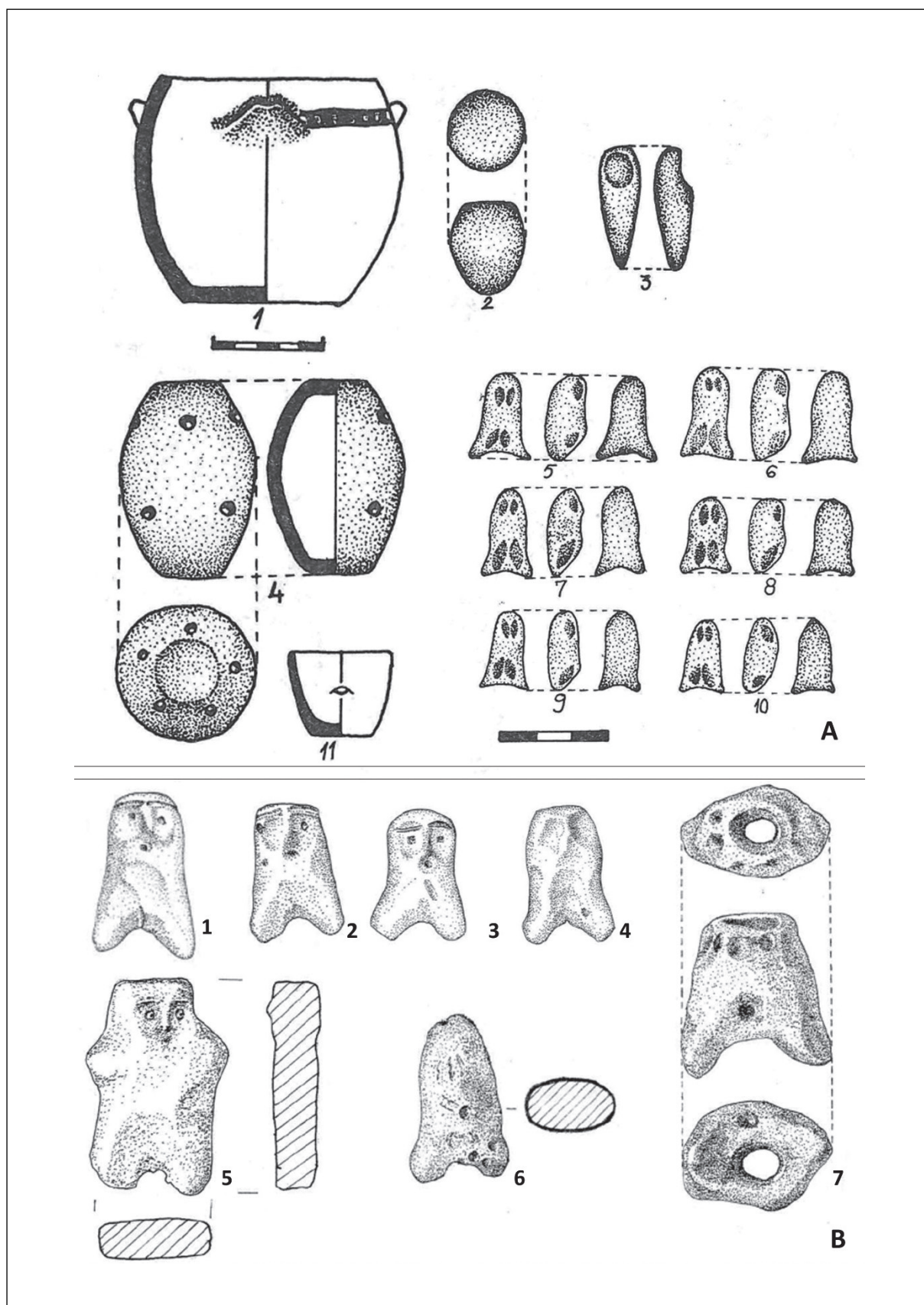


PLATE 28. A. The “magical kit” found in the Bunești hillfort (after Sirbu 1993); B. Various clay anthropomorphic figurines found in Stâncești hillfort (after Florescu, Florescu 2005).



PLATE 29. 1. Hoard no. 2 of Bunești hillfort (after Spânu 2014, fig. 9); 2–3. Bracelets from Stâncești hillfort (after Florescu, Florescu 2005); 4. Various types of beads discovered in the Stâncești hillfort; 5. Reconstruction of a feminine costume in the Central Moldavian Plateau based on the Epureni hoard (after Spânu 2014, fig. 4).

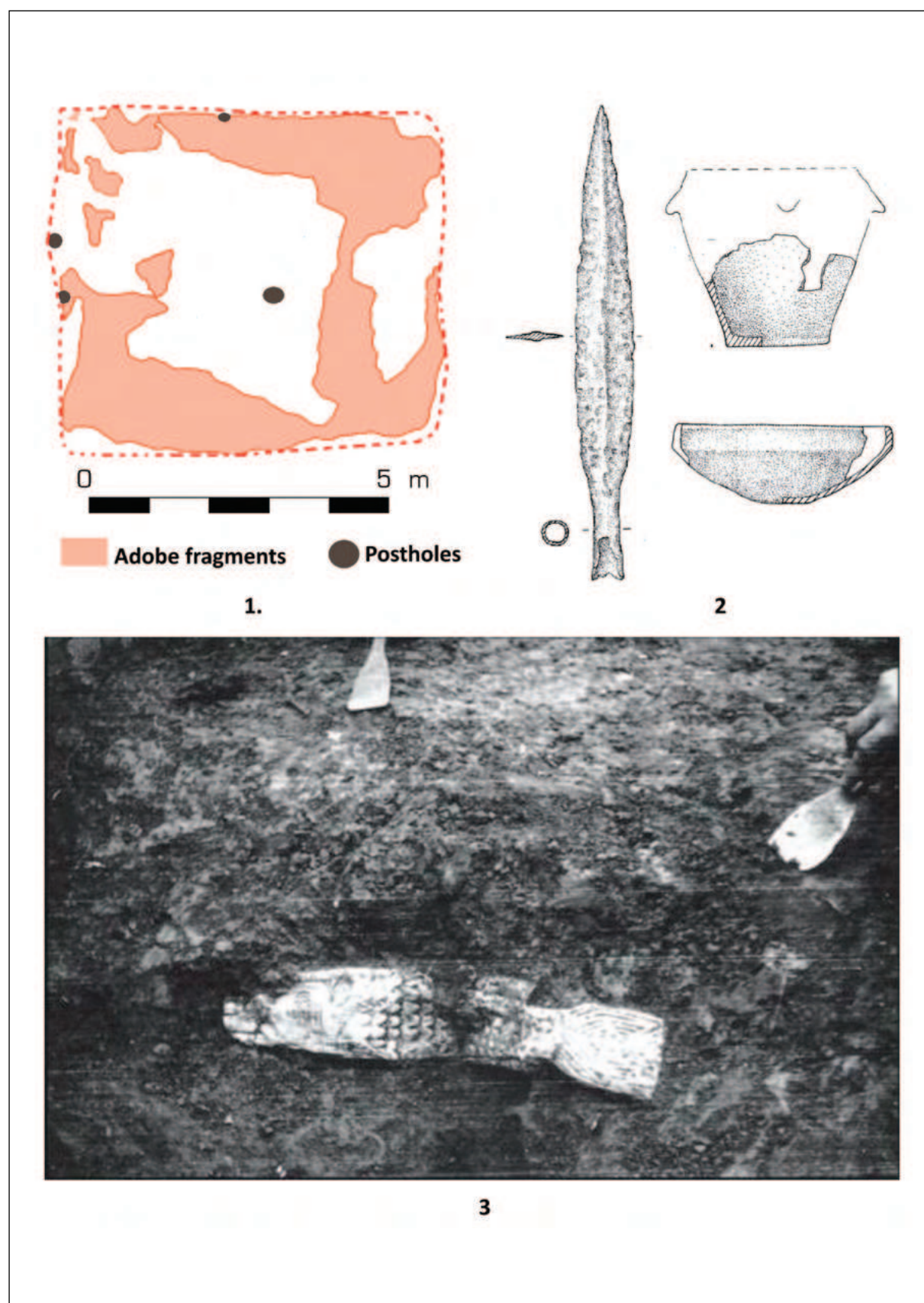


PLATE 30. The hoard of Stâncești. The context of discovery. 1. Plan of dwelling no. 10 where the hoard was found (after Florescu, Florescu 2005); 2. Part of the inventory of dwelling no. 10 (after Florescu, Florescu 2005); 3. Photo of the large golden applique during its removal (*Archive of the Botoșani County Museum*).

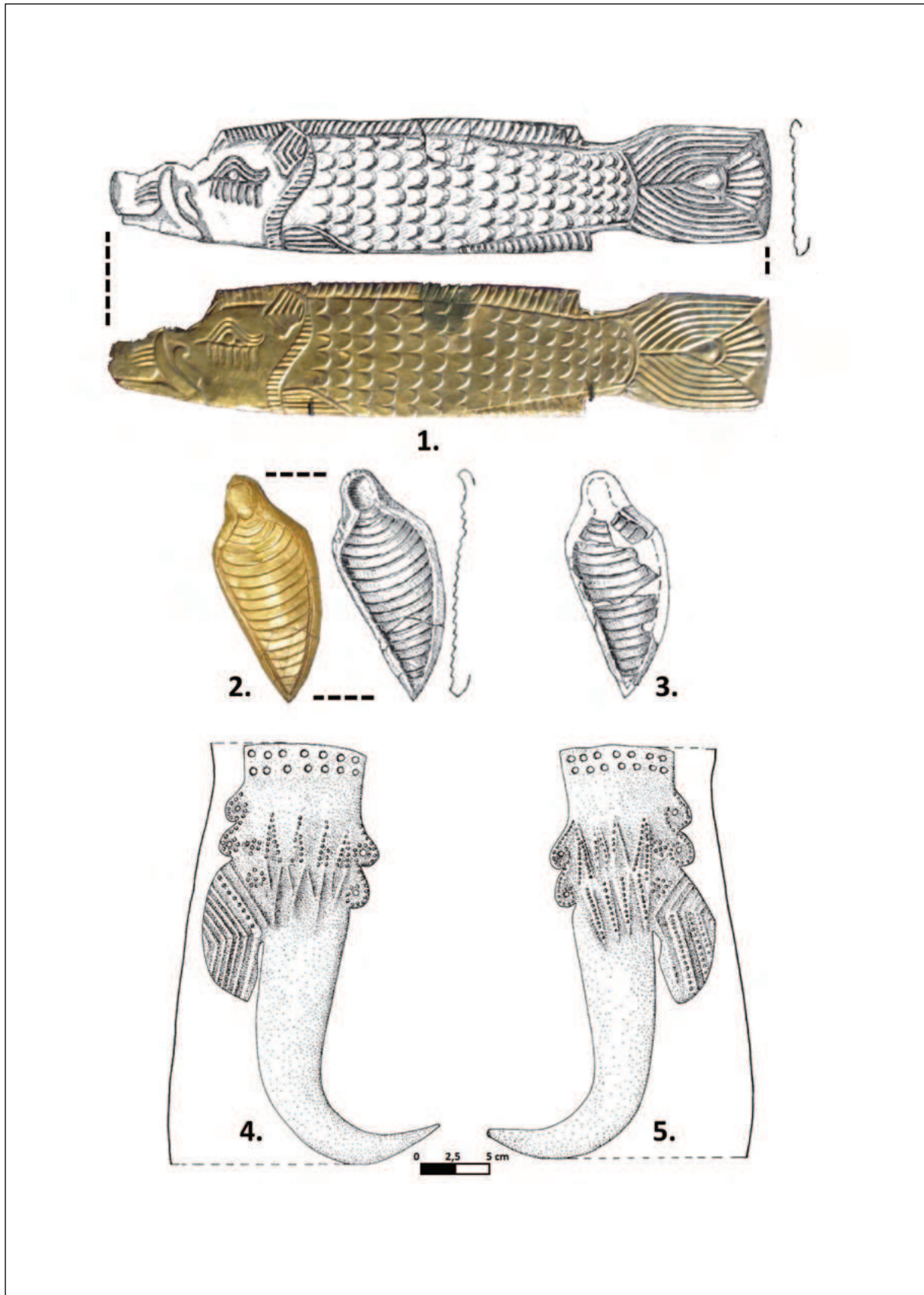


PLATE 31. The hoard of Stâncești. 1. The large golden zoomorphic applique (after Florescu and Florescu 2005); 2–3. The smaller golden appliques (after Florescu and Florescu 2005); 4–5. Bronze appliques (after Florescu and Florescu 2005).

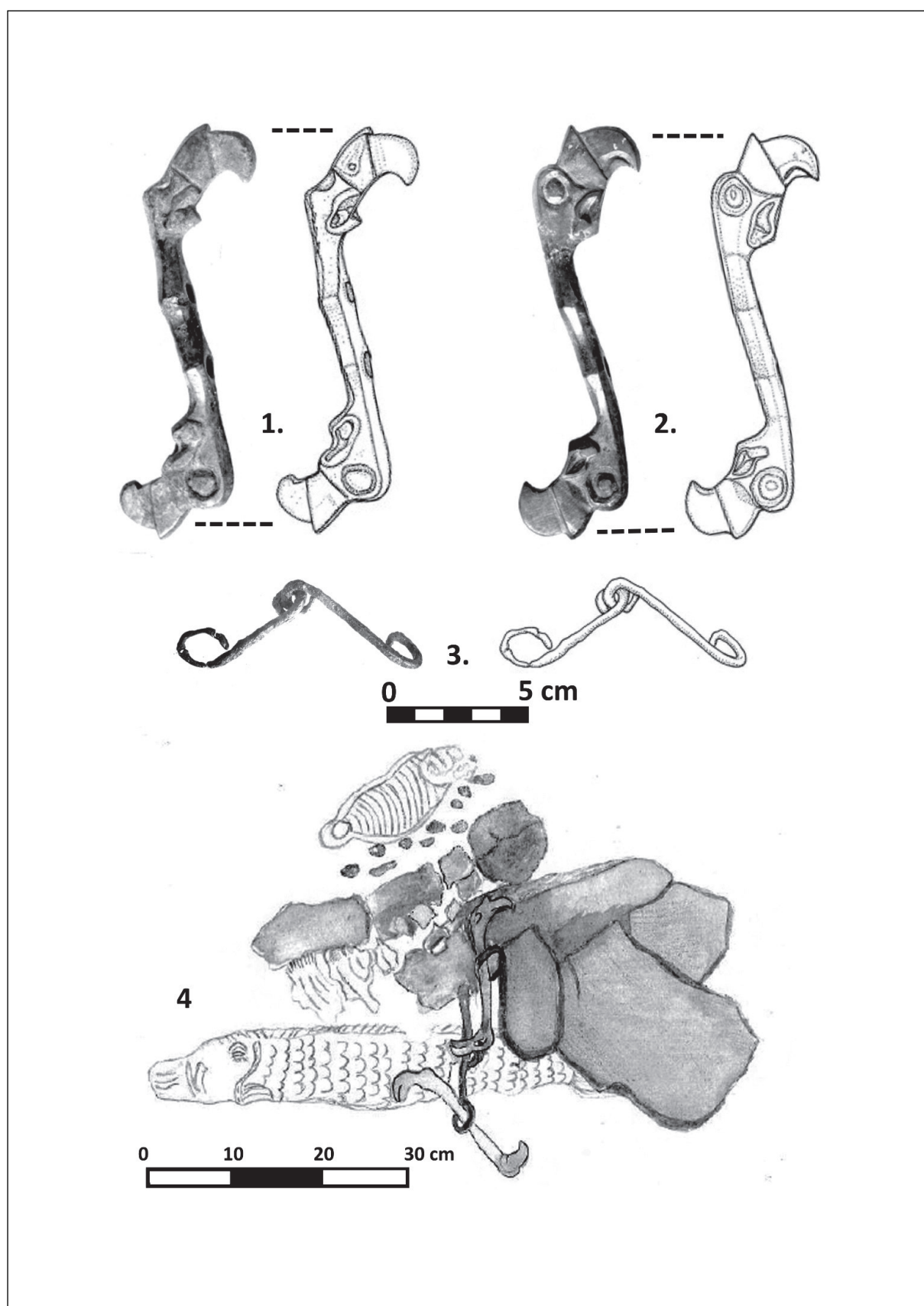


PLATE 32. The hoard of Stâncești. 1–2. Bronze-silver psalias (photo after Florescu and Florescu 2005; drawings after Teleagă 2016); 3. Iron horse-bit (after Florescu and Florescu 2005); 4. The hoard in situ (after Florescu and Florescu 2005).

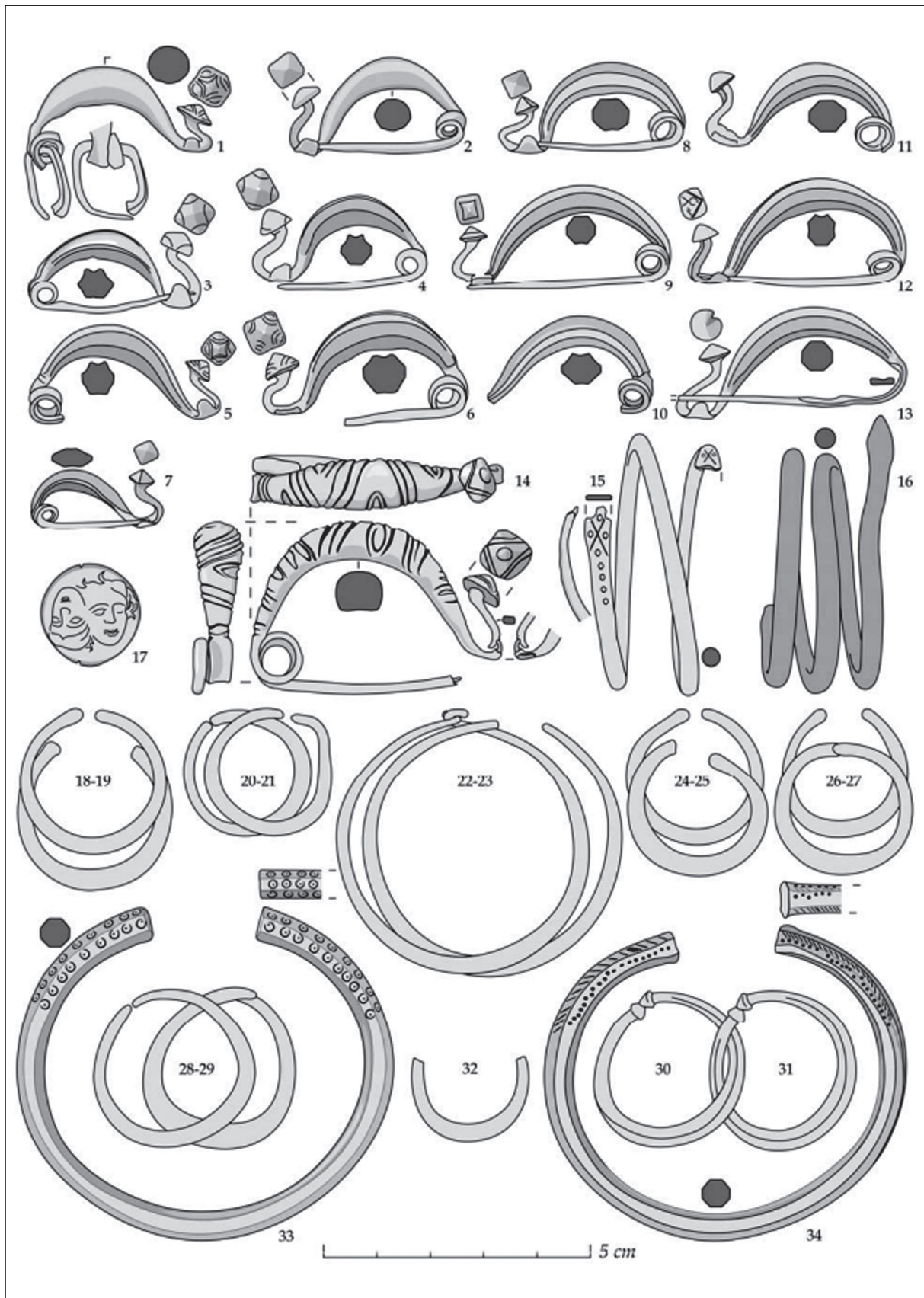


PLATE 33. Hoard no. 1 from Bunești hillfort (after Spânu 2014, fig. 8).



PLATE 34. The golden diadem from Bunești hillfort. 1. Drawing (after Bazarciuc 1998). 2–4. Photos from different angles (Radu Oltean); 5. Detail with the zoomorphic endings (Radu Oltean).



1



2

PLATE 35. Artistic reconstructions of the hillforts (Radu Oltean). 1. Cotnari-Cătălina hillfort; 2. Stâncești hillfort.

